



Daniel Rockmore <dnrockmore@gmail.com>

From Dan Rockmore - a few questions in preparation for your arrival

58 messages

Daniel Rockmore <dnrockmore@gmail.com>**Thu, May 31, 2007 at 9:39 AM**

To: csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>, Stacey Lydon <staceyl@santafe.edu>

Dear CSSS'ers -

I'd appreciate it if you could take a moment to answer the following questions (by responding to me, and if you like, the group) and if you are really industrious, posting the answers on your CSSS wiki marker:

1. What are your main interests?
2. What sorts of expertise can you bring to the group?
3. What do you hope to get out of the CSSS?
4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I'm looking forward to meeting you all. Best wishes for smooth travel.

Dan Rockmore
Director, 2007 SFI CSSS

Ryan Chisholm <chisholm@princeton.edu>**Thu, May 31, 2007 at 9:51 AM**

To: Daniel Rockmore <dnrockmore@gmail.com>

Hi Dan,

My answers are:

1. Theoretical ecology, mathematics, computer science, conservation biology.
2. I have a degree in mathematics and experience as a computer programmer. I have applied these tools to numerous ecological problems.
3. New ideas for applying quantitative tools to ecological problems. New colleagues to share ideas with.
4. Not at this stage.

Ryan.

[Quoted text hidden]

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> _____
> Ccsss-sf-07 mailing list

> Csss-sf-07@santafe.edu
> <http://www.santafe.edu/mailman/listinfo/sss-sf-07>
>

Dwyer, Paul <PDwyer@mays.tamu.edu>

Thu, May 31, 2007 at 10:04 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

1. What are your main interests?

Modelling group cognition: How do groups of people create shared knowledge from personal knowledge and collaborative deliberation? What processes intervene in knowledge creation and sharing? How can environments be created that facilitate knowledge creation and sharing? What inspires this kind of collaboration/cooperation?

2. What sorts of expertise can you bring to the group?

Five years of experience in agent-based modeling, primarily with Repast. Good familiarity with social network analysis and the general complexity science literature.

3. What do you hope to get out of the CSSS?

Meet collaboration partners for future research and publication. Increase technical skill and knowledge. Expand my mind.

4. Do you have any possible projects in mind for the CSSS?

I'm open to better opportunities, but I'm currently working on a study trying to measure diversity of thought expression in the blogosphere and the processes that explain it.

Paul Dwyer
Doctoral Candidate
Department of Marketing
Mays Business School
Texas A&M University
College Station, TX 77843

Nathan B Menke/OVCU <nmenke@vcu.edu>

Thu, May 31, 2007 at 10:51 AM

To: Daniel Rockmore <dnrockmore@gmail.com>

1. What are your main interests?

I am interested in applying complex system analysis and network theory to human physiology and disease processes. Currently, I am studying wound healing, sepsis, atherosclerosis, and polycystic ovarian syndrome using ODEs and network theory.

2. What sorts of expertise can you bring to the group?

I am a physician with a background in biochemistry, computer science, and bioinformatics.

3. What do you hope to get out of the CSSS?

I hope to gain knowledge and practical experience in analysing complex systems using computational modeling techniques.

4. Do you have any possible projects in mind for the CSSS?

Modeling the formation of an atherosclerotic plaque in the coronary arteries.

Nathan Menke, M.D.
Assistant Professor
Department of Emergency Medicine
Virginia Commonwealth University Medical Center
nmenke@vcu.edu

-----csss-sf-07-bounces@santafe.edu wrote: -----

To: csss-sf-07@santafe.edu
From: "Daniel Rockmore" <dnrockmore@gmail.com>
Sent by: csss-sf-07-bounces@santafe.edu
Date: 05/31/2007 09:39AM
cc: Ginger Richardson <grr@santafe.edu>
Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

Csss-sf-07 mailing list
Csss-sf-07@santafe.edu
<http://www.santafe.edu/mailman/listinfo/csss-sf-07>

spyridon.kotsovilis@elf.mcgill.ca <spyridon.kotsovilis@elf.mcgill.ca>
To: Daniel Rockmore <dnrockmore@gmail.com>

Thu, May 31, 2007 at 10:59 AM

Dear Professor Rockmore,
This is Spyridon (Spyro) Kotsovilis, a Greek PhD student in Political Science from McGill, Montreal. Thank you for writing to us. Just before final preparations for the trip (I am flying out tomorrow) I am responding to your inquiry with some preliminary facts and info about myself and interests. I hope they are useful.

> 1. What are your main interests?

I am a Ph.D student in Political Science at McGill and my academic interests and expertise include democratization (especially in Southern Europe, Eastern Europe and former USSR), ethnic conflict (expertise in the Balkans) and international politics (war and IR theory). My dissertation involves the mapping and analysis of organizational networks of rival (opposition and government) groups during the mass mobilizations in the recent 'Color Revolutions' in Ukraine and elsewhere in Eastern Europe/former USSR.

But I do also have an interest in History, Physics and some pure mathematics (fan of Cantor and Godel), and sometimes they spill over to my main analysis.

> 2. What sorts of expertise can you bring to the group?

Since my undergraduate I had a multi-disciplinary approach to problems (my BA was with Tad Homer-Dixon and Anatol Rapoport, both of whom had encouraged looking at solutions to problems from multiple perspectives). So, besides expertise in Social Sciences (especially Political Science), I'd say I am good at combining perspectives and quickly identifying links between seemingly unrelated subjects. I also followed the first steps into Agent-Based modeling in the Social Sciences, so I have an interest and knowledge of the attempts to apply

it to Social Sciences.

> 3. What do you hope to get out of the CSSS?

Since my dissertation treats Revolutionary mobilization as a complex, dynamic phenomenon, I hope the CSSS will help me finetune both my hypotheses and my methods (especially as far as modeling is concerned). I will be looking to see how networks in other disciplines function and what I can learn from that for my own analysis.

> 4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I could work on some aspects of my dissertation--especially, the issue of network resilience and efficiency with respect to stress (as far as the transmission of information in a network is concerned). But I am waiting to see what the first week of lectures will look like, what else may be on the table and then decide.

> I'm looking forward to meeting you all. Best wishes for smooth travel.

Likewise, I am looking forward to meeting you. I appreciate your taking the time to write to us, to get to know our interests better and help us with a smooth and rapid incorporation into the program.

All the best,

Spyro

DeRosa, Joseph K. <jderosa@mitre.org>

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

Thu, May 31, 2007 at 11:26 AM

See below

Looking forward to seeing you all,

Joe

I'd appreciate it if you could take a moment to answer the following questions (by responding to me, and if you like, the group) and if you are really industrious, posting the answers on your CSSS wiki marker:

1. What are your main interests?

I am interested in the engineering of complex (information-intensive) systems. I think that we can apply evolutionary theory to development of complex systems - and we must. Large mega-projects are bogged down in traditional SE reductionist methodologies.

2. What sorts of expertise can you bring to the group?

Typical electrical engineering background with specialty in field theory, Linear System Theory, communications Theory and software development.

3. What do you hope to get out of the CSSS?

I hope to warm up after a cold winter and get a better understanding of

how to apply complexity theory to the (hard and soft sciences) associated with developing network-centric systems.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I might be interested in looking at the effects of social networks in solving problems that don't lend themselves to reductionist solutions, i.e., if hierarchy is efficient for solving a reducible problem, what is efficient for solving non-reducible problems?

I'm looking forward to meeting you all. Best wishes for smooth travel.

Dan Rockmore
Director, 2007 SFI CSSS

[Quoted text hidden]

Shah, Vikas <vikas.shah@vanderbilt.edu>

Thu, May 31, 2007 at 11:26 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>, "Shah, Vikas" <vikas.shah@vanderbilt.edu>

1. What are your main interests?

Fundamentally I'm interested in the neurobiological mechanisms underlying consciousness. How does processing which occurs at multiple levels e.g. electrochemical gradients, synapses, neurons, and neuronal networks get (apparently) integrated? What gives rise to qualia? What are the most important mechanisms underlying adaptivity in the brain?

2. What sorts of expertise can you bring to the group?

In terms of complexity, very little. Though I have a broad-stroke familiarity, this will be my first in-depth exposure. My areas of expertise are primarily biomedical in nature: I recently finished medical school, and in addition completed a PhD in structural biology two years ago, using biomolecular NMR as a primary technique. I also have a B.A. background in philosophy and am a long-standing computer hobbyist.

3. What do you hope to get out of the CSSS?

My main hope is that what I learn at CSSS will act a springboard for future exploration of the field, and how it might fit into a long-term research program investigating consciousness. I know other major investigators in the field are using computational modeling as one of the several fronts they are using to push our understanding, and I think that a foundation in complexity will serve me well in at least this regard.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

At this point, no.

Vikas

Vikas Shah, MD, PhD
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615-335-3808
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From: csss-sf-07-bounces@santafe.edu on behalf of Daniel Rockmore

Sent: Thu 5/31/2007 8:39 AM

To: csss-sf-07@santafe.edu

Cc: Ginger Richardson

Subject: [Ccss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

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Ccss-sf-07 mailing list

Ccss-sf-07@santafe.edu

<http://www.santafe.edu/mailman/listinfo/csss-sf-07>

Rafal Raciborski <rafal.raciborski@emory.edu>

Thu, May 31, 2007 at 11:27 AM

Reply-To: rafal.raciborski@emory.edu

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

> 1. What are your main interests?

models of income redistribution with endogenous human capital formation and party platforms; statistical computing

> 2. What sorts of expertise can you bring to the group?

statistical modeling, game theory, some experience with graph algebra

> 3. What do you hope to get out of the CSSS?

learn new approaches to modeling, hopefully get involved in some multidisciplinary research projects

> 4. Do you have any possible projects in mind for the CSSS? (Recall > that you will all be working in groups on at least one project with > the goal of presenting your progress on the last day and finishing up > a paper by summer's end.)

same as [1], i am trying to bridge political economy models of income redistribution with the optimal taxation literature

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Thu, May 31, 2007 at 11:58 AM

To: csss-sf-07@santafe.edu

Greetings, This is Spyro responding to the inquiry with some preliminary facts and info; I hope they are useful.

1. What are your main interests?

Democratization (especially in Souther Europe, Eastern Europe and former USSR), ethnic conflict (expertise in the Balkans) and international politics (war and IR theory). My dissertation involves the mapping and analysis of organizational networks of rival (opposition and government) groups during the mass mobilizations in the recent 'Color Revolutions' in Ukraine and elsewhere in Eastern Europe/former USSR.

2. What sorts of expertise can you bring to the group?

Game Theory and some knowledge of Agent-Based modeling.

3. What do you hope to get out of the CSSS?

I hope the CSSS will help me fine tune my methods (especially as far as modeling is concerned). I will be looking to see how networks in other disciplines function and what I can learn from that for my own analysis.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by Summer's end.)

I could work on some aspects of my dissertation--especially, the issue of network resilience and efficiency with respect to stress (as far as the transmission of information in an network is concerned). But I am waiting to see what the first week of lectures will look like, what else may be on the table and then decide.

Looking forward to meeting all of you.

best,

Spyro

Spyridon Kotsovilis
Ph.D Candidate, Political Science
McGill University
Spyridon.kotsovilis@mail.mcgill.ca

[Quoted text hidden]

Joshua L. Payne <jpayne@cems.uvm.edu>
To: Daniel Rockmore <dnrockmore@gmail.com>

Thu, May 31, 2007 at 1:09 PM

Dan,

Here are my answers to your questions:

1. What are your main interests?

Evolutionary computation, artificial life, optimization

2. What sorts of expertise can you bring to the group?

The majority of my research experience is in evolutionary computation, particularly in algorithm development, analysis, and also in practical application domains (a particularly nice way to get my head out of the clouds). I've also done a bit of work with other flavors of population-based optimization algorithms and am pretty good with linear programming. I enjoy modeling, and have experience in the development of agent-based systems for modeling evolutionary dynamics in biotic communities.

My most recent work has focused on evolutionary dynamics on graphs, so this has drawn me into the wonderful world of network analysis. I have a fairly good understanding of this field as well.

3. What do you hope to get out of the CSSS?

I hope to meet some wonderful and inspirational people (after looking at the participant and faculty listings, I think this is a given!). I also hope that this experience will open my eyes to other areas of research that I may not know much about. Aside from academics, I'd like to get out a bit and see some of the natural wonders of New Mexico, hopefully accompanied by some of the aforementioned wonderful and inspirational people :-)

4. Do you have any possible projects in mind for the CSSS?

Hmmm...maybe. Whether or not I follow my own ideas will depend on how much more interesting other people's project ideas sound!!

Great, I look forward to meeting everyone. Travel safe.

j

Joshua L. Payne
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-----Original Message-----

From: csss-sf-07-bounces@santafe.edu [mailto:csss-sf-07-bounces@santafe.edu]

On Behalf Of Daniel Rockmore

Sent: Thursday, May 31, 2007 8:40 AM

To: csss-sf-07@santafe.edu

Cc: Ginger Richardson

Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

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Olaf Bochmann <olaf@iastate.edu>**Thu, May 31, 2007 at 2:04 PM**

To: Daniel Rockmore <dnrockmore@gmail.com>

Hi Dan, a part of the answer is already on the [wiki site](#). Therefore I will keep it short and structured. I will not cc to the group, because people may get mad if they find their mailbox flooded.

On May 31, 2007, at 8:39 AM, Daniel Rockmore wrote:

1. What are your main interests?

Even if I am working in Biology now, my main interest is still the engineering approach:

How to design (optimal) complex systems?

- where some useful properties emerge from local interactions
- where system configuration is self-organizing
- that show some sort of robustness ...

2. What sorts of expertise can you bring to the group?

- about four years of experience in computational mechanics and ϵ -machine reconstruction
- more then seven years on agent based modeling --- mainly applied to supply chain management, but more recently also to genetic networks
- using Ant Colony Optimization in multi-agent manufacturing control
- some background in Bayes theory, systems theory, machine learning ...

3. What do you hope to get out of the CSSS?

- to get up to date on computational mechanics
- some inspiration for reconstruction of networks from correlated data sets

4. Do you have any possible projects in mind for the CSSS?

I would like to kick off a project that aims to understand the dynamic structure and evolution of genetic networks.

Ciao,

Dr. Olaf Bochmann, Iowa State University, Dept. of Ecology, Evolution & Organismal Biology, 253 Bessey Hall, 50011 Ames IA, USA, phone +1 515 294 3081, mobile +1 515 708 1354, Olaf@iastate.edu, <http://Bochmann.ComplexLab.org>

Spiekermann,KP <k.p.spiekermann@lse.ac.uk>**Thu, May 31, 2007 at 6:25 PM**

To: Daniel Rockmore <dnrockmore@gmail.com>

Dear Dan,

thanks for your email and for setting up such an exciting program for us.

Below are my answers (and I'll post them on the Wiki as well).

Best wishes

Kai

1. Main Interests:

I'm a political philosopher with a political science background. I'm interested in norm emergence and compliance, computational models of social processes, and philosophy of the social sciences.

2. Expertise:

I've set up some small simulations in Mathematica (and I like to get better at it). However, (assuming that there will many much more prolific programmers around), I think my core expertise for the group will be on the theoretical side, e.g. philosophical issues of model-building, moral philosophy and model-building, links with political science, etc.

3. What I hope to get out of the CSSS

Apart from learning new stuff and looking across disciplinary boundaries, I'm particularly interested in meeting people who share my interest in applying computational models in philosophy and the social sciences. But it would also be cool if I end up doing something completely different in the end!

4. Possible projects:

a.) One big question which has been on my mind for quite a while:

What is the the use of computational models in the social sciences from a descriptive / prescriptive / philosophy of science perspective? Maybe we can work on one aspect of this question...

b.) Recently, Geoff Brennan and Philip Pettit described the "Economy of Esteem" (2004) as a major reason why people obey social norms. Roughly speaking, people want other people to think well of them and adapt their behavior accordingly. Can we think of agent-based models of esteem exchange? Are there interesting dynamics of esteem?

[Quoted text hidden]

>

> [Csss-sf-07 mailing list](#)

> Csss-sf-07@santafe.edu

> <http://www.santafe.edu/mailman/listinfo/sss-sf-07>

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PLEASE NOTE CHANGE OF ADDRESS: FLAT 30 (PREVIOUSLY 32)

Kai Spiekermann

- PhD Candidate LSE, Department of Government -

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Please access the attached hyperlink for an important electronic communications disclaimer:

<http://www.lse.ac.uk/collections/secretariat/legal/disclaimer.htm>

Heather Beil <hbeil@email.unc.edu>

Thu, May 31, 2007 at 7:54 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Daniel Rockmore wrote:

> Dear CSSS'ers -

>

> I'd appreciate it if you could take a moment to answer the following
> questions (by responding to me, and if you like, the group) and if you
> are really industrious, posting the answers on your CSSS wiki marker:

>

> 1. What are your main interests?

Broadly, I'm interested in access to health care for children, especially children with special health care needs. As far as complex systems are concerned, I'm interested in applying modeling techniques to policy research to examine consequences of policy interventions. I'm also interested in applying complex systems to medical decision making on the consumer and provider levels.

>

> 2. What sorts of expertise can you bring to the group?

I've been trained in econometrics methods (regression, fixed and random effects models, etc), and I know how to use Stata and SAS statistical programs.

>

> 3. What do you hope to get out of the CSSS?

I hope to gain a more solid understanding of complexity theory and modeling techniques, and how they apply to policy research. I'm also looking forward to hearing how people from different disciplines are applying complex systems to their research.

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

I don't have an exact project in mind, but I would like to do a project that is applying complexity to a health intervention or policy problem so that I can gain a better understanding in how it applies to my field.

>

> I'm looking forward to meeting you all. Best wishes for smooth travel.

>

> Dan Rockmore

> Director, 2007 SFI CSSS

[Quoted text hidden]

Simon Angus <s.angus@unsw.edu.au>

Thu, May 31, 2007 at 8:31 PM

Reply-To: Simon Angus <s.angus@unsw.edu.au>

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hi Dan and others,

DR> 1. What are your main interests?

Modelling of complex human interactions, both in terms of difficulty of the interaction problem, and the complexity of the interaction (and recently, information) space. For example, anything from modelling contagion (disease, marketing, technological spillovers) to strategic interaction (e.g. trust/cooperation/corruption) at individual or firm level. Though my background (science, self-organizing materials systems in chemistry) and interest in complex systems means I'm keen on most things to do with complex phenomena/dynamics ...

DR> 2. What sorts of expertise can you bring to the group?

Pretty cross-disciplinary, background includes research-level polymer chemistry/engineering, liberal arts pursuits (political science/IR) and now economics (game theory, graph theory, micro-theory). I'm attached to a theory group, but spend about 30% of my time in theory, the rest where theory stops -- doing simulations of agent-systems. Most recently, modelling has focussed on agents and networks (esp. dynamic/ad-hoc networks). Networks - measures, models, theory would be a main interest. Most simulation work is done in Matlab (which I've worked in extensively for 6 years), or NetLogo.

DR> 3. What do you hope to get out of the CSSS?

Be exposed to good foundational, but also recent thinking/knowledge in Complex Systems - particularly in the interaction between the physical and human sciences. Plus meet lots of like-minded people (Australia is a small place for Complex Systems!), make friends, and possible collaboration partners. Oh, and I hope to run up Atalaya Mountain a half-dozen times.

DR> 4. Do you have any possible projects in mind for the CSSS? (Recall DR> that you will all be working in groups on at least one project with DR> the goal of presenting your progress on the last day and finishing up DR> a paper by summer's end.)

Something that I've been interested in lately is the resurgence in the 'group selection' hypothesis -- (David Sloan Wilson, Elliot Sober etc.) -- many of our (read 'economic') agent models not only confound genotypic and phenotypic selection but also only apply it at the individual level only .. untangling these, and then introducing group selective mechanisms (or are these emergent properties of individual selection pressures?) is something I'd like to explore, either in an abstracted (has been done a bit lately) or applied (not so much; e.g. micro-founded human strategic interaction..) model.

See you in Santa Fe!

Simon.

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+-----+

RHONDA BELUE <rz10@psu.edu>

Thu, May 31, 2007 at 8:38 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

On Thu, 31 May 2007 09:39:49 -0400 "Daniel Rockmore" wrote:

Dear
CSSS'ers -

I'd appreciate it if you could take a moment to answer the following questions (by responding to me, and if you like, the group) and if you are really industrious, posting the answers on your CSSS wiki marker:

1. What are your main interests?

Applying a complex systems framework to intervention design for chronic relapsing disease in disenfranchised populations.
I would be interested in using network analysis to find social or community hubs that could be used to increased the sustainability of community based interventions.

2. What sorts of expertise can you bring to the group?

Solid background and experience in biostatistical and epidemiologic methods (study design, HLM, survival analysis, SEM etc) and content expertise in chronic disease epi/ health behavior and related theories.

3. What do you hope to get out of the CSSS?

Increase my understanding of the complex systems science tool kit/applications. I hope to meet some new colleagues and potentially develop a project or 2 that I can continue collaboratively after the program.
Also, I would like to become more proficient in some of the modeline techniques.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)
See 1 above, however, I'd like to think about this some more.

See you in a couple of days. rhonda

Sayan Bhattacharyya <bhattach@umich.edu>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Thu, May 31, 2007 at 9:48 PM

On 5/31/07, **Daniel Rockmore <dnrockmore@gmail.com>** wrote:

1. What are your main interests?

I've a background (and graduate degrees) in both computer science and the humanities. In my ongoing PhD dissertation work (in Comparative Literature), I am, among other things, looking at the tradition in continental philosophy and political theory that originates with Spinoza -- I find much in that tradition of looking at the world that reminds me (in an abstract way) of the complex systems approach.

In a less abstract way: I'm very intrigued by the idea of complex systems approaches to language and linguistics, although I've only barely begun to explore this. It does not relate directly to my dissertation research, but it is something I would like to explore in the future. Specifically, I am thinking of a paper by Ricard Sole and Ferrer i Cancho on lexical networks that I read recently.

2. What sorts of expertise can you bring to the group?

I've programming/ modeling experience with agent-based systems in Repast, Ascape and Swarm. I've taken a couple of graduate classes in Complex Systems: one in modeling and one in theory. I've fairly good programming skills, and a fairly wide (and interdisciplinary) range of interests.

3. What do you hope to get out of the CSSS?

(1) To get a sense of where in the Complex Systems field exciting things are happening; (2) To get a better sense of the kind of people who are drawn to this field, and why they are drawn to this field; (3) To pick up useful, practical skills (such as programming in Netlogo, etc.)

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I'm interested in the idea of lexical networks (please see (1) above) and that's definitely something I'm keeping in

mind as a possible project idea. More broadly, projects related to language, society and/or cognition are things I find appealing. (I am intrigued by Paul Dwyer's suggestion, in an earlier response to your email, about a project related to ideas in the blogosphere, for example, and would love to hear more about it.) But in general I am quite open to suggestions as far as this project would be concerned.

Thank you,

Sayan.

--

Sayan Bhattacharyya
PhD candidate
Program in Comparative Literature
University of Michigan, Ann Arbor

Mollie Poynton <mollie.poynton@nurs.utah.edu>

Thu, May 31, 2007 at 10:23 PM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu
Cc: Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

I'm interested in knowledge discovery/ induction of knowledge models from health care data for the purpose of clinical decision support. My primary area of application has been health behavior, but I've also done some pharmacokinetic/ pharmacodynamic modeling.

2. What sorts of expertise can you bring to the group?

I have general experience with application of knowledge discovery methods: data preprocessing/ quality issues, feature selection, multivariate statistics, artificial neural networks, support vector machines, estimating accuracy/ performance, model validation, etc... I've worked with various kinds of health care data, and I'm familiar with its unique issues.

3. What do you hope to get out of the CSSS?

I hope to gain a foundational understanding of complex systems that will enhance my conceptualization of problems, and choice of research questions/methods in the future. I also am really looking forward to the primer in agent-based modeling/ simulation.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I do have remote, IRB-approved access to electronic health records (not de-identified, but meeting limited data set criteria) for a sample of 3000 patients coded as current or former tobacco users. I think it would be interesting to use what we learn at CSSS to examine the effect of different concept representations and/or changes in data quality on feature selection or induction of models from clinical (EHR) data. It would also be really interesting to examine preventive services delivery from a complex systems perspective.

From the road on my drive to Santa Fe...

Mollie Poynton

Christopher Atwood <atwood@nativis.us>

Thu, May 31, 2007 at 10:58 PM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

Analysis of timeseries signals (especially chaotic signals) that are buried in white noise, and intramolecular charge-transfer.

2. What sorts of expertise can you bring to the group?

LabVIEW programming, analytical chemistry, organometallic chemistry, electrochemistry

3. What do you hope to get out of the CSSS?

To be exposed to a broad range of ideas.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

Yes, I suggest a project on studying whether charge transfer within/between molecules can be chaotic in the presence of a magnetic field and gradient. There might be regimes where an interaction between the field, gradient, and charge motion becomes chaotic, with implications for the behavior of biomolecules.

I'm looking forward to meeting you all. Best wishes for smooth travel.

Dan Rockmore
Director, 2007 SFI CSSS

[Quoted text hidden]

Aaron Frank <aafrank@cox.net>

Fri, Jun 1, 2007 at 12:05 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

Military revolutions, state formation and dissolution, technology and world history, agent-based modeling, evolution and ecology.

2. What sorts of expertise can you bring to the group?

Political science, international relations, world history, agent-based modeling, national security policy.

3. What do you hope to get out of the CSSS?

I'm looking forward to getting some in-depth exposure to ecological theory,

research, and analysis. I'm particularly interested in the application of biological and evolutionary concepts to the study of the formation of, and competition between polities. This incorporates many areas of complexity studies ranging from evolution to networks to economics to socialization and learning.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I'd like to get a jump start on developing a model or set of models for use in my dissertation research. My hope is to construct an evolving international system out of boundedly rational agents, with the specific goal of understanding how changes in economic and military technologies and organization can alter the domestic/internal organization of agents (constitutional structure and logic), and the balance of power between them (international relations, trade, war, etc.). At a minimum, I'm hoping for a paper model or concept, while my more ambitious goal would be to have something computational.

Aaron

-----Original Message-----

From: csss-sf-07-bounces@santafe.edu [mailto:csss-sf-07-bounces@santafe.edu]

On Behalf Of Daniel Rockmore

Sent: Thursday, May 31, 2007 9:40 AM

To: csss-sf-07@santafe.edu

Cc: Ginger Richardson

Subject: [Ccsss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

Aaron Benjamin Frank <afrank3@gmu.edu>
 To: Daniel Rockmore <dnrockmore@gmail.com>
 Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Fri, Jun 1, 2007 at 12:20 AM

1. What are your main interests?

Military revolutions, state formation and dissolution, technology and world history, agent-based modeling, evolution and ecology.

2. What sorts of expertise can you bring to the group?

Political science, international relations, world history, agent-based modeling, national security policy.

3. What do you hope to get out of the CSSS?

I'm looking forward to getting some in-depth exposure to ecological theory, research, and analysis. I'm particularly interested in the application of biological and evolutionary concepts to the study of the formation of, and competition between polities. This incorporates many areas of complexity studies ranging from evolution to networks to economics to socialization and learning.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I'd like to get a jump start on developing a model or set of models for use in my dissertation research. My hope to construct an evolving international system out of boundedly rational agents, with the specific goal of understanding how changes in economic and military technologies and organization can alter the domestic/internal organization of agents (constitutional structure and logic), and the balance of power between them (international relations, trade, war, etc.). At a minimum, I'm hoping for a paper model or concept, while my more ambitious goal would be have something computational.

Aaron

----- Original Message -----

From: Daniel Rockmore <dnrockmore@gmail.com>

Date: Thursday, May 31, 2007 9:39 am

Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

Larose-Filotas Elise <elise.larose-filotas@umontreal.ca>

Fri, Jun 1, 2007 at 12:36 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

Hello!

here are my answers:

1. What are your main interests?

Theoretical ecology, spatiotemporal population dynamics, biological coevolution, invasive species, statistical physics.

2. What sorts of expertise can you bring to the group?

Background in Math and Physics and some computer programming (C and matlab).

Individual-based modeling and spatial modeling. Familiar with FFT and 2D FFT analysis.

3. What do you hope to get out of the CSSS?

Learn, satisfy my curiosity, and improve my knowledge of complex systems. Meet and discuss with other students who also have multidisciplinary research background and interests. Establish a network of contacts ...but most of all enjoy myself.

4. Do you have any possible projects in mind for the CSSS? (Recall

that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I don't have any specific project in mind and I am very open but I would be interested in working on any ecological or evolutionary problem which may involve studying the impact of the addition of spatial degrees of freedom.

see you soon!

elise

Élise Filotas
Étudiante au doctorat / Ph.D. Candidate
Laboratoire de systèmes complexes / Complex Systems Laboratory
Université de Montréal
520, Côte Sainte-Catherine (429)
Montreal (Qc) H2V 2B8 Canada
Tel.: 514.343.8064
Fax.: 514.343.8008

From: csss-sf-07-bounces@santafe.edu on behalf of Daniel Rockmore
Sent: Thu 5/31/2007 9:39 AM
To: csss-sf-07@santafe.edu
Cc: Ginger Richardson
Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

Daniel.Lester@csiro.au <Daniel.Lester@csiro.au>
To: dnrockmore@gmail.com, csss-sf-07@santafe.edu
Cc: grr@santafe.edu

Fri, Jun 1, 2007 at 1:32 AM

Hello all! a few brief answers....

1. What are your main interests?

Applied nonlinear dynamics, spatiotemporal phenomena involving complex species transport; i.e. chemical reaction, population/ecology dynamics & the role and reconstruction of attractors therein.

2. What sorts of expertise can you bring to the group?

Continuum modelling, spectral analysis, dimensional reduction, chaotic advection

3. What do you hope to get out of the CSSS?

I am looking forward to coming to grips with complex systems science properly and exploring the diverse raft of applications under this umbrella - and to have fun in the meantime! specifically I am interested in evolution of systems with spatial variation, and elucidating controlling phenomena, but in general I am keen to encounter new ideas and concepts.

4. Do you have any possible projects in mind for the CSSS?

I do have a particular interest in the role transport does (or can) play in the evolution of complex systems with spatial degrees of freedom, especially the approximation of low-dimensional attractors to facilitate efficient investigation of parametric variation. However, I am also open to a range of ideas within the vague sphere of temporally-evolving systems...

I look forward to meeting you all

cheers

Dan

Dr. Daniel R. Lester
Postdoctoral Research Fellow
Fluid Dynamics Cluster
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fax: +61 3 9252 6240

-----Original Message-----

From: csss-sf-07-bounces@santafe.edu

[Quoted text hidden]

Frederic Bartumeus <fbartu@princeton.edu>

Fri, Jun 1, 2007 at 9:42 AM

Reply-To: fbartu@princeton.edu

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hello!!

here you have my answers:

> 1. What are your main interests?

Theoretical ecology, spatial ecology, population ecology, biological evolution, statistical physics, anomalous diffusion.

> 2. What sorts of expertise can you bring to the group?

Background in biology, ecology, and programing in C++, Matlab, R.

Stochastic and individual-based modeling. Animal movement data analysis.

> 3. What do you hope to get out of the CSSS?

Improve my knowledge on CS, and learn new methodological techniques, as well as new ways 'to think' and/or address scientific questions...Also, met new people, make new contacts, talk about and get deep into multidisciplinary science with them. Overall enjoy myself by learning and having a some extra-good time with the rest of students.

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

I may have several projects in mind but also I'm open to work in anything related to spatial ecological problems or evolutionary problems.

see you soon!

fred

> Dan Rockmore
> Director, 2007 SFI CSSS
> _____
> Csss-sf-07 mailing list
> Csss-sf-07@santafe.edu
> <http://www.santafe.edu/mailman/listinfo/sss-sf-07>

--
Frederic Bartumeus

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andybell@umich.edu <andybell@umich.edu>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Fri, Jun 1, 2007 at 9:44 AM

Quoting Daniel Rockmore <dnrockmore@gmail.com>:

> Dear CSSS'ers -
>

> I'd appreciate it if you could take a moment to answer the following
> questions (by responding to me, and if you like, the group) and if you
> are really industrious, posting the answers on your CSSS wiki marker:

> 1. What are your main interests?

> i guess im interested in tools for communicating complexity to
non-expert stakeholders, the role of models in environmental
decisionmaking, and agent-based approaches to modeling social
institutions

> 2. What sorts of expertise can you bring to the group?

> a great attitude and a winning smile. i have an engineering and
computing background but have struggled to gain competence in social
science and policy in the last 2 years; i bring a little of that.

> 3. What do you hope to get out of the CSSS?

> i'd like to meet some new people doing the same kind of thing as me,
and get some new perspective on problems and ideas i haven't got
figured out yet; in theory i'd like to do the same for others.

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

> i'd like to look at the underlying requirements for self-governing
agricultural water systems, and how they can be represented
computationally.

also, in case we have time to have fun on the side, i'm coming with my
climbing gear and a (small) tent, a road bike if they will let me on
the plane with it, and a trumpet. hope some of you others bring the
same!

Amir Goldberg <amirg@princeton.edu>

Fri, Jun 1, 2007 at 10:05 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Hi,

See me replies below.

All best,

Amir

-----Original Message-----

From: csss-sf-07-bounces@santafe.edu [mailto:csss-sf-07-bounces@santafe.edu]

On Behalf Of Daniel Rockmore

Sent: Thursday, May 31, 2007 9:40 AM

To: csss-sf-07@santafe.edu

Cc: Ginger Richardson

Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

Dear CSSS'ers -

I'd appreciate it if you could take a moment to answer the following questions (by responding to me, and if you like, the group) and if you are really industrious, posting the answers on your CSSS wiki marker:

1. What are your main interests?

I am interested in understanding cultures as spontaneously emergent mechanisms that regulate social conduct and in developing models for simulating the diffusion of culture in complex social systems. I am specifically interested in technological diffusion as a social contagion process.

2. What sorts of expertise can you bring to the group?

Knowledge of a broad array of sociological theory, social networks, and experience in computational social theory (I have an undergrad degree in computer science and have worked as a programmer).

3. What do you hope to get out of the CSSS?

New ways for operationalizing and modeling questions of cultural diffusion, methods and tools for agent-based modeling and advanced techniques for social network analysis. I hope to meet others of similar interests for future research and collaboration.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I hope to find new ways of modelling social contagion and apply them to technological diffusion such as in the case of iPod use or the exponential growth of the blogosphere.

I'm looking forward to meeting you all. Best wishes for smooth travel.

Dan Rockmore

Director, 2007 SFI CSSS

[Quoted text hidden]

Jose Delgado <delgado5@cox.net>

Fri, Jun 1, 2007 at 10:08 AM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

I am interested in the interactions between neuroscience, decision making, and social and legal systems

2. What sorts of expertise can you bring to the group?

I am not much of an expert in anything, but I know some about Law, cognitive science, decision making, neuroeconomics, and computational neuroscience.

3. What do you hope to get out of the CSSS?

Learn as much as possible, meet interesting people, and have a good time.

4. Do you have any possible projects in mind for the CSSS?

I am open to working on any exciting interdisciplinary ideas.
But right now I am thinking that since computational neuroscientists seem to be somewhat numerically underrepresented, I might want to focus on that.

See you all soon,

jd

jd2@email.arizona.edu <jd2@email.arizona.edu>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Fri, Jun 1, 2007 at 10:12 AM

1. What are your main interests?

I am interested in the interactions between neuroscience, decision making, and social and legal systems

2. What sorts of expertise can you bring to the group?

I am not much of an expert in anything, but I know some about Law, cognitive science, decision making, neuroeconomics, and computational neuroscience.

3. What do you hope to get out of the CSSS?

Learn as much as possible, meet interesting people, and have a good time.

4. Do you have any possible projects in mind for the CSSS?

[Quoted text hidden]

Monika Piotrowska <monika@mimuw.edu.pl>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Fri, Jun 1, 2007 at 11:29 AM

Hi all!

1. What are your main interests?

I am a mathematician. I am interested in mathematical modeling of biological processes such as cell cycle, signaling pathways involved in the process of cell proliferation, differentiation, inflammation, cancer genesis and tumor development. I am also interested in pattern formation phenomena. From mathematical point of view I am interested in ordinary and partial differential equations with and without delay and the bifurcation

theory.

2. What sorts of expertise can you bring to the group?

I think that mostly it will be the mathematical background (related with ODEs and DDEs and some PDEs, bifurcation theory) as well as the experience with working with Matlab.

3. What do you hope to get out of the CSSS?

I think that the participation in summer school will give me a chance to know more about the topics I am mostly interested in, see 1. I hope I will be able to extend my biological knowledge, start the new collaborations.

4. Do you have any possible projects in mind for the CSSS?

I do have a particular interest in

- * modeling the cell cycle of normal and cancer cells,
- * the investigation of the role of inflammation on the cancer genesis process and tumor development.

I look forward to see all of you in Santa Fe,

Monika

[Quoted text hidden]

[Quoted text hidden]

Alexander A. Shpunt <ashpunt@mit.edu>

Fri, Jun 1, 2007 at 12:49 PM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

I am broadly interested in any area where application of elegant modeling and imaginative techniques can bring important insights. It is a true pleasure to be able to say quantitative things about real-life situations.

If I were to name the closest match to my interests, I would say non-equilibrium statistical physics and stochastic processes, random walks and applications.

2. What sorts of expertise can you bring to the group?

I have a working knowledge of stochastic processes, combinatorial techniques, stat. physics, computer science, information theory and optics.

For the last year I tried to learn some molecular biology, but in this area I am sure you are all better experts than me.

3. What do you hope to get out of the CSSS?

To integrate bits and pieces of technical knowledge into and understand what is the scope and the tools of the "Complex Systems" field.

Have a great time with interesting people.

4. Do you have any possible projects in mind for the CSSS?

At this point everything is open. There are many possibilities. I hope we will jointly come up with something truly meaningful, in the first days/week of the school.

See you all soon!

Alex

Ludington, William <William.Ludington@ucsf.edu>

Fri, Jun 1, 2007 at 1:08 PM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

Ecology and application of ecological concepts to understanding cell- and systems biology-level order. I am currently working on understanding the role of cell suicide programs in the evolution of multicellularity from a biochemical standpoint. I am also interested in the interface between fluid dynamics and simple diffusion inside a cell: how does macromolecular mixing occur?

2. What sorts of expertise can you bring to the group?

I recently moved from ecology to molecular biology so I have a background in ecology, molecular cell biology and evolutionary theory.

3. What do you hope to get out of the CSSS?

I am very much interested in learning sociology and economics approaches to understanding systems. I would also like to get experience with agent-based modeling. Psyched to hear there are so many math and programming gurus. I will be pestering you with questions!

4. Do you have any possible projects in mind for the CSSS?

I am open to trying something new or sticking with the old. Most of the questions posed earlier interest me. I'd also like to tackle something a past group worked on: evolutionary transition from unicellular to multicellular. Rather than asking the question, what gives rise to complexity, though, I think this project should be addressed from the perspective of altruism and community interaction. This could be very broadly approached to say, what parameters increase formation of stable physical groups under variation and selection in trait space. I am particularly interested in how cell suicide influences this transition. Bigger is not necessarily more complex: an error in a cell separation program after cell division can produce a colonial organism. One last project I'm interested in: how can molecular motors dragging vesicles can set up bulk flow in the confined, low-Reynolds number environment of the cytosol. I am particularly thinking of the scenario in *Drosophila* and *C. elegans* oocytes where violent churning is observed inside the cell. How big do the vesicles have to be? How fast do the motors have to move? Do similar processes aid mixing without drastic bulk flow in normal cells? In the very

small yeast cell? How does this flow aid mixing?

Also-- I'm bringing bikes, rods, a guitar -- definitely interested in some local recreation.

See ya,
Will

Christian Darabos <Christian.Darabos@unil.ch>

Fri, Jun 1, 2007 at 1:12 PM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

> 1. What are your main interests?

Computer science in general and particularly bio-inspired computation, genetic programming and evolutionary algorithms. Also, I have a special interest in cell biology, genomics and bioinformatics.

> 2. What sorts of expertise can you bring to the group?

all of the above (although I'm not an expert in any of these domains), programming skills and computer tools, DNA and protein databases.

> 3. What do you hope to get out of the CSSS?

Some degree of expertise in understanding, analyzing and working with Complex Systems in general.

Meet new, interesting, challenging, nice people and hopefully develop an bit of a social and professional network in the filed of CS.

> 4. Do you have any possible projects in mind for the CSSS?

(Recall

> that you will all be working in groups on at least one project with

> the goal of presenting your progress on the last day and finishing up

> a paper by sumer's end.)

I'm currently working on analyzing the tolerance to failure of small boolean networks that share some interesting properties with gene regulatory networks. Another filed I'd like to explore and maybe try to model is the regulatory effect of micro-RNA on genes.

I'm looking forward to meeting you all on Sunday !

Chris

James.Battin@noaa.gov <James.Battin@noaa.gov>

Fri, Jun 1, 2007 at 7:13 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hi, all. Here are my answers. See you all Sunday!

1. What are your main interests?

My main academic interest is in understanding how organisms respond to rapid environmental change (urbanization, climate change, habitat restoration, etc.). A couple questions that are especially interesting to me are: (1) how do animals select habitat at multiple spatial and temporal scales? and (2) how well do animals do at selecting habitats when confronted with novel environmental conditions?

2. What sorts of expertise can you bring to the group?

I am a jack of few trades, master of none. My background is in ecology and conservation biology. My recent work has involved numerical modeling of fish population dynamics. Although I study complex systems, I have very little background in complex systems science (that's why I'm here). I did my PhD research in Arizona in an area ecologically similar to Santa Fe, so I have some knowledge of the local flora and fauna (especially the birds) that I'd be happy to share with those who are interested. Anyone want to get up at 0400 to hunt for vireo nests?

3. What do you hope to get out of the CSSS?

I want to get a sense of the techniques available for studying complex systems and the ways in which they might be applied to the questions I'm interested in. I'm especially keen to learn from the economists and other social scientists; I think there's a lot of potential for applying methods developed for economics and finance to ecological questions.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

My fondest hope is that something I learn here will allow me finally to make sense of some of my frustratingly confounding and confounded data on nesting habitat use by birds. So, no, I have no realistic project ideas.

James

Imre Risi Kondor <irk2101@columbia.edu>

Fri, Jun 1, 2007 at 11:38 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

> 1. What are your main interests?

>

machine learning, statistical learning theory, computational harmonic analysis, climate modeling

> 2. What sorts of expertise can you bring to the group?

All sorts of statistical modeling methods. How can anyone live without them?

In addition, if anybody is interested, I can also go on and on about the wonders of non-commutative harmonic analysis.

>

> 3. What do you hope to get out of the CSSS?

To get out of my mathematical ivory tower a little and connect what I know with really interesting phenomena in the natural and social sciences.

>

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

I'd like to be in a project which spans several areas, so I'd like to find out a bit more about what everybody else is interested in before proposing something.

I am looking forward to seeing you all Sunday!

Risi.

Will Braynen <wbraynen@gmail.com>
To: Daniel Rockmore <dnrockmore@gmail.com>

Sat, Jun 2, 2007 at 12:31 AM

Hi Dan,

Here are my answers to your four questions, as well as a question for you about #4 (under 4 below).

1. Main interests: political philosophy/theory, economic markets, desert. Would also like to learn more about statistical learning.
2. Expertise I could bring to the group: political philosophy/theory, cognitive science
3. What I hope to get out of the CSSS: learn more about modeling complex systems, including both theoretical and hands-on skills, especially as applied to political theory, social networks, economic markets.
4. Possible group projects for the CSSS: I would be perfectly happy to work on someone else's project. Is this okay? Is there supposed to be a project per person or a project per group?

Thanks,
Will

[Quoted text hidden]

[Quoted text hidden]

Joseph Lizier <jlazier@it.usyd.edu.au>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu

Sat, Jun 2, 2007 at 9:24 AM

Hi Dan, all,

1. Information dynamics in complex systems; taskless adaptation of self-organized systems.

2. Inside our area, mainly information theoretical techniques for analysis and design of complex systems. Outside, I guess I'm a telecoms engineering generalist, with experience in ICT systems and software engineering.

3. Looking forward to meeting people from a diverse range of backgrounds within complex systems to learn about the wide range of activities within in the area and application opportunities for my work, and gain opportunities for collaboration.

4. Have to admit I haven't put much thought to it at this stage. My work has been very theoretical up to this point, so I'd definitely be looking at an applications based project, possibly combining the theoretical work I've been doing with someone else's application space.

Looking forward to meeting everyone,
--joe

-----Original Message-----

From: csss-sf-07-bounces@santafe.edu [mailto:csss-sf-07-bounces@santafe.edu]

On Behalf Of Daniel Rockmore

Sent: Thursday, 31 May 2007 11:40 PM

To: csss-sf-07@santafe.edu

Cc: Ginger Richardson

Subject: [Ccss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

alex.healing@bt.com <alex.healing@bt.com>

Sat, Jun 2, 2007 at 11:51 AM

To: csss-sf-07@santafe.edu

Hi all,

I'm looking forward to meeting you tomorrow.

cheers,

Alex

1. What are your main interests?

I'm interested in the application of bottom-up, nature-inspired, complex adaptive systems to manage the complex dynamics found increasingly in today's ICT systems, particularly when deployed in an ad-hoc, decentralised fashion and in volatile environments. Such a problem calls for the engineering of 'service ecosystems' consisting of simple, intelligent entities which elicit self-* properties.

2. What sorts of expertise can you bring to the group?

I have a pretty good amount of Java programming experience, am familiar with Matlab and have a broad view/interest of application areas of complexity science in ICT. My background in AI is fairly general but I lean mostly towards multi-agent learning and evolutionary approaches.

3. What do you hope to get out of the CSSS?

To gain a broad view of the field as well as become aware of and focus on particular methodologies that I hear about during CSSS and improve my modelling skills in particular. I hope to make some useful contacts possibly for future research and generally have a great time.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

None to suggest just yet but I'm keen to work on a project which is or can be made general across many application areas.

From: csss-sf-07-bounces@santafe.edu on behalf of Daniel Rockmore
Sent: Thu 31/05/2007 14:39
To: csss-sf-07@santafe.edu
Cc: Ginger Richardson
Subject: [Ccss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

Johan Nyström <nystjoha@fy.chalmers.se>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Sat, Jun 2, 2007 at 5:58 AM

Hi everyone :-)

> 1. What are your main interests?

My work is centered around coarse graining techniques in molecular simulations, models of biological/chemical systems (like living cells) and recently also morphogenesis. I also have a very broad Complex Systems interest in general.

> 2. What sorts of expertise can you bring to the group?

Lots of knowledge about simulations of chemical systems, a bit about hierarchies and coarse graining in general.

> 3. What do you hope to get out of the CSSS?

Some different views of how Complex Systems research is used in fields other than physics (which is where I work).

> 4. Do you have any possible projects in mind for the CSSS?

I've recently found an article where the morphogenesis of slime mold (like an amoeba) is modeled. The model consists of a cellular automata/PDE and seems to be able to give some very interesting results, including cell sorting and cell movement, with only a very limited number of parameters. It would be fun to use this article as a start of a project, but I'm very open to other suggestions. Anyone interested in PDEs, CAs or morphology in general are very welcome to send me an email and I'll be happy to tell you more.

gabrielelaspada@libero.it <gabrielelaspada@libero.it>

Sat, Jun 2, 2007 at 1:24 PM

To: dnrockmore <dnrockmore@gmail.com>

Cc: csss-sf-07 <csss-sf-07@santafe.edu>, grr <grr@santafe.edu>

Hi everyone!

I hope that the following information will be useful.

1. What are your main interests?

Statistical mechanics and its application to financial theory. Market microstructure and liquidity/volatility interplay. Limit order book properties.

2. What sorts of expertise can you bring to the group?

Some knowledge about theoretical physics, statistical mechanics and disordered systems (diluted systems, RFIM, etc.). A good expertise in mathematics. A quite wide knowledge of many recent works on financial markets and market microstructure.

3. What do you hope to get out of the CSSS?

I hope to know more about topics I am interested in. And I hope to learn many things about interesting areas such as networks, biological complex systems and agent-based modeling.

4. Do you have any possible projects in mind for the CSSS? (Recall

**> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)**

I would carry on a project about volatility and stock price random walk at tick-by-tick level. Another interesting issue could be differences and similarities between "large tick" and "small tick" stocks.

I look forward to see all of you soon,

gabriele

----- Initial Header -----

From : csss-sf-07-bounces@santafe.edu
To : csss-sf-07@santafe.edu
Cc : "Ginger Richardson" grr@santafe.edu
Date : Thu, 31 May 2007 09:39:49 -0400
Subject : [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

> Dear CSSS'ers -
>
> I'd appreciate it if you could take a moment to answer the following
> questions (by responding to me, and if you like, the group) and if you
> are really industrious, posting the answers on your CSSS wiki marker:
>
> 1. What are your main interests?
>
> 2. What sorts of expertise can you bring to the group?
>
> 3. What do you hope to get out of the CSSS?
>
> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)
>
> I'm looking forward to meeting you all. Best wishes for smooth travel.
>
> Dan Rockmore
> Director, 2007 SFI CSSS
>
> _____
> Csss-sf-07 mailing list
> Csss-sf-07@santafe.edu
> <http://www.santafe.edu/mailman/listinfo/csss-sf-07>
>

Passa a Infostrada. ADSL e Telefono senza limiti e senza canone Telecom
<http://i-mode.wind.it/>

Michael Thomas Wojnowicz <mtw28@cornell.edu>

Sat, Jun 2, 2007 at 4:40 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Hi everyone!

> Dear CSSS'ers -

>

> I'd appreciate it if you could take a moment to answer the following
> questions (by responding to me, and if you like, the group) and if you
> are really industrious, posting the answers on your CSSS wiki marker:

>

> 1. What are your main interests?

I'm currently researching continuous temporal dynamics in the formation of intentional decisions. How do minds get from a place that feels impulsive, unintended, or nonconscious to a place that feels agentic, deliberate, controlled?

> 2. What sorts of expertise can you bring to the group?

I know how to do psychological testing for implicit biases and associations.

> 3. What do you hope to get out of the CSSS?

I'm thrilled to learn more about applying complex systems to all sorts of social and physical phenomena, both qualitatively and quantitatively.

As I'm just embarking on this dynamical systems journey, I'm very interested in the mathematical/engineering techniques for themselves. They are a beautiful language.

Thank god that there are other outdoorsy people. I can't wait to go hiking or camping.

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

I've collected dynamical systems-inspired data demonstrating different patterns of mouse-movement trajectories when people report that they "like" or "dislike" different ethnic groups. Although this data has helped me make a particular theoretical claim, it may avail itself to new kinds of analyses.

I'm also quite happy to work with other people on their projects.

Mike

> I'm looking forward to meeting you all. Best wishes for smooth travel.

>

> Dan Rockmore

> Director, 2007 SFI CSSS

[Quoted text hidden]

Elizabeth Mullane <emullane@ucla.edu>**Sat, Jun 2, 2007 at 7:07 PM**

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

> Dear CSSS'ers -

>

> I'd appreciate it if you could take a moment to answer the following
> questions (by responding to me, and if you like, the group) and if you
> are really industrious, posting the answers on your CSSS wiki marker:

>

> 1. What are your main interests?

Modeling in the social sciences, self-organizing systems, complex adaptive systems, ancient urbanism, comparative archaeology; Central Asia, Mediterranean, Near East

> 2. What sorts of expertise can you bring to the group?

I am a new initiate into the world of complexity. I have dabbled in developing simulations using Borland C++ and I have been researching self-organizing biological systems in an attempt to apply it to ancient human systems.

>

> 3. What do you hope to get out of the CSSS?

Until this point, I have been merely an observer of other's working in the field of complex systems studies. It is my hope that through my work at SFI and interacting with experts in a variety of field I will be able to actively apply a complex systems perspective to my own archaeological research.

>

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

I am interested in exploring how it is possible to use computational modeling to describe self-organization in human systems.

>

> I'm looking forward to meeting you all. Best wishes for smooth travel.

>

> Dan Rockmore

> Director, 2007 SFI CSSS

[Quoted text hidden]

Alejandro Balbin <alebalbin@gmail.com>**Sat, Jun 2, 2007 at 8:42 PM**

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hello All !

1. What are your main interests?

Agent based modeling of biological multi-agent systems, Information flow in multi-agent systems, Interaction between individual level and population level. Ecological modeling. Relationships between the molecular level and the ecological level. Different levels of selection.

2. What sorts of expertise can you bring to the group?

Theoretical biology, molecular biology, evolution theory, biosemiotics, Information theory applied to molecular biology. Protein Databases.
Basic programming in C++ and Malab

3. What do you hope to get out of the CSSS?

I want to obtain experience in agent base modeling applied to biology and others fields.
To go deeper in the complex systems theory and its applications in different and diverse fields.

Meet new people, research collaborators and make networking in the complex systems field.

4. Do you have any possible projects in mind for the CSSS?

I am open to different projects.
But I would like to work in modeling multi agent systems in which the interaction between different hierarchic levels, the interaction with variable environments, the flow of information, and the emergence of novelties can be addressed and analyzed.

I am looking forward ... I will see you tomorrow.

alejandro balbin

On 5/31/07, **Daniel Rockmore** <dnrockmore@gmail.com> wrote:

[Quoted text hidden]

Csss-sf-07 mailing list
Csss-sf-07@santafe.edu
<http://www.santafe.edu/mailman/listinfo/sss-sf-07>

Oscar Alejandro Balbin Rondon <oabalbinr@unal.edu.co>
To: Daniel Rockmore <dnrockmore@gmail.com>
Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Sat, Jun 2, 2007 at 8:47 PM

Hello All !

1. What are your main interests?

Agent based modeling of biological multi-agent systems, Information flow in multi-agent systems, Interaction between individual level and population level. Ecological modeling.
Relationships between the molecular level and the ecological level. Different levels of selection.

2. What sorts of expertise can you bring to the group?

Theoretical biology, molecular biology, evolution theory, biosemiotics, Information theory applied to molecular biology. Protein Databases.

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To go deeper in the complex systems theory and its applications in different and diverse fields.

Meet new people, research collaborators and make networking in the complex systems field.

4. Do you have any possible projects in mind for the CSSS?

I am open to different projects.

But I would like to work in modeling multi agent systems in which the interaction between different hierarchic levels, the interaction with variable environments, the flow of information, and the emergence of novelties can be addressed and analyzed.

I am looking forward ... I will see you tomorrow.

alejandro balbin

----- Original Message -----

From: Daniel Rockmore <dnrockmore@gmail.com>

Date: Thursday, May 31, 2007 8:39 am

Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

Gregor Obernosterer <gregor@tbi.univie.ac.at>

Sat, Jun 2, 2007 at 9:35 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, martinez@imp.univie.ac.at, Ginger Richardson <grr@santafe.edu>

> 1. What are your main interests?

My main interests are in computational biology and there mainly in string algorithms and RNA secondary structure prediction. To me population genetics is also a compelling discipline. Evolution in general, models and mutations (phylogenetic combinatorics) are things I enjoy to talk and read about.

> 2. What sorts of expertise can you bring to the group?

From my technical skills I can contribute with programming experience. But more important I enjoy working in a team and spanning networks.

> 3. What do you hope to get out of the CSSS?

I started reading about food webs and allometry, something totally new to me and it caught my attention. So far I have worked more with exact algorithms and therefore I would like to get a better understanding in modelling.

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

Well, yes kind of. But it probably needs your help in being well formulated. The story is the following: Around ten years ago developmental biologists discovered by chance so called microRNAs (miRNAs). Those are non protein coding genes, that regulate messenger RNAs by bining to their 3'UTRs (sequences after the STOP codon). Thereby they can shut-down translation. Now there are algorithms that predict miRNA binding sites (imperfect pattern matching) but it is known that the RNA folds back and thereby introduces another level of complexity: secondary structure. Now, I have started to write an algorithm that predicts "accessible regions" in RNA molecules. This is important for miRNAs because it was just recently shown (to be published) that secondary structures around bining sites impair miRNA function. What I would like to build kind of an accessibility map of genomes and see how different sequences (exons, introns, UTRs) that have diverse sequence complexities (compression levels) differ. It would be cool to then evaluate confirmed miRNA binding sites.

Another problem would be to reconstruct phylogenetic trees from quartets (trees of four leaves) starting with an sequence alignment. However, here I have not done much since a year or so. But, I brought along a lot of literature and I have support from Andreas Dress (<http://www.icb.ac.cn/director1.htm>) who actually started this project.

Well, I guess I will now go for a first Chili :-)

See you all tomorrow,
Gregor

Daniel Neilson <dh2102@columbia.edu>
To: Daniel Rockmore <dnrockmore@gmail.com>

Sat, Jun 2, 2007 at 10:00 PM

1. My main interests are two: open-source software and other distributed modes of production, and monetary economics viewed through the institutional features of the banking system.

2. I have a great deal of knowledge about the details of the financial system. I have experience running simulations and analyzing data using python.

3. I would like to begin a new project/collaboration relating to one of my areas of interest. I hope to make contacts that I will stay in touch with beyond the end of the program. I am excited about immersing myself in the methodological training and intellectual atmosphere offered by the program.

4. One possible project would use an agent-based approach to examine the role and effects of a lender of last resort during a financial crisis. Another would study the division of large projects into constituent tasks in environments of varying degrees of centralization. I am open, however, to inspiration from without.

Dan
dh2102@columbia.edu

----- Original message -----

From: "Daniel Rockmore" <dnrockmore@gmail.com>
To: csss-sf-07@santafe.edu
Cc: "Ginger Richardson" <grr@santafe.edu>
Date: Thu, 31 May 2007 09:39:49 -0400
Subject: [Csss-sf-07] From Dan Rockmore - a few questions in preparation for your arrival

[Quoted text hidden]

[Quoted text hidden]

Natasha Khan <khanatasha@gmail.com>
To: Daniel Rockmore <dnrockmore@gmail.com>

Sun, Jun 3, 2007 at 4:01 AM

1. What are your main interests?

Basically, a pure biotechnologist by heart & mind, but my gearing interest is in the holistic approach of systems biology to understand the interplay of different hierarchies of biological information. Macromolecular complexes, regulatory/cell signaling networks, structure & dynamics of biological systems (particullary nerve & immune systems) and the leading-edge technologies of genomics, proteomics attract my attention.

2. What sorts of expertise can you bring to the group?

Well not an expert of anything but I have basic experince of biotech-related techniques in the fields of molecular biology, microbiology, and immunology. I have a research experince in theoretical structural biology and have worked on related bioinformatics softwares & biological databases. But as far as Complexity is concerned, my concepts need adequate grooming.

3. What do you hope to get out of the CSSS?

I am hoping for a very interactive interdisciplinary scientific culture at CESS. As a voracious learner, I would love to take further doses of mathematical & statistical modeling, a bit refinement of network theory & dynamics, in order to better understand its application in systems biology. From CESS this June, I am determined to get as much as possible. In the long-run, CESS is going to shape my knowledge & future research studies.

4. Do you have any possible projects in mind for the CESS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

Not at this moment. I am open to everything but brainstorming on few ideas.

See you soon!

Natasha

Natasha Qaisar Khan
Lecturer
Centre of Biotechnology
University of Peshawar
Peshawar, Pakistan.
Tel: +92-91-5845599
+92-301-8971426

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Csss-sf-07 mailing list
Csss-sf-07@santafe.edu
<http://www.santafe.edu/mailman/listinfo/sss-sf-07>

Wenyun Zuo <wyzuo@unm.edu>

Sun, Jun 3, 2007 at 5:25 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu
Cc: Ginger Richardson <grr@santafe.edu>

Hi Daniel and CSSS'ers,

Here is my homepage: <http://www.unm.edu/~wyzuo/>

I'm looking forward to meeting you all.

1. What are your main interests?

I am interested in Metabolism Theory especially in unicellular organism, metabolism pathway network in unicellular organism, and the entropy of network system (e.g. ecosystem entropy). My former research in China is about species-abundance relationship, environmental factors affecting species distribution, and also ecological modeling for predicting potential distribution of species, which I am still interested in and working on.

2. What sorts of expertise can you bring to the group?

Programming in R (a nice free software, like Matlab). Rhododendron diversity pattern in China. Metabolism scaling theory.

3. What do you hope to get out of the CSSS?

The ways people thinking are what I most hope to get out of the CSSS. Secondly, I want to learn more about the network scaling, nonlinear science, mathematic biology and physics.

4. Do you have any possible projects in mind for the CSSS? (Recall

that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

I am working on theoretical project about biodiversity pattern basic on species niche and range size. Secondly, I am working on a mechanism model for biodiversity distribution pattern by combining logistic equation and diffusion equation. Furthermore, I am looking for the problem in metabolism scaling which I hope to be my project for summer school and part of my dissertation.

Wenyun Zuo
Program for Interdisciplinary Biological and Biomedical Sciences (PIBBS)
Biology Department, University of New Mexico

MSC03-2020
1 University of New Mexico
Albuquerque, NM 87131-0001
Office phone: 505-277-0870

Amitabh Trehan <amitabh.trehan@gmail.com>

Sun, Jun 3, 2007 at 4:59 AM

To: csss-sf-07@santafe.edu
Cc: dnrockmore@gmail.com

Hi fellow CSSSers,
I have more details on my wiki entry ...

1. What are your main interests?

Computer algorithms (My current research is towards developing self-healing algorithms for reconfigurable networks. We are looking for (and finding) interesting connections in other areas such as electrical circuits and many biological/ecological systems.) Modelling (nonlinear population dynamics using coupled differential equations). I have dabbled a bit in phonetics, multilingual typesetting (LaTeX), computer codes etc. I am always interested in learning more physics.

..and I spend a lot of time doing photography and playing sports :)

2. What sorts of expertise can you bring to the group?

Programming, computer science theory. Algorithmic and other wierd ideas!

3. What do you hope to get out of the CSSS?

An understanding of the 'field'. A lot of interesting ideas and interactions. Some directions for my research.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

As stated in q.1. I would be interested in a project to construct/conceptualise/analyse some 'self-healing' system. Another interesting project for me would be to work on dynamics of ecological systems (like population dynamics) and possibly combine both ideas.

--
What's in a Signature?
that which we call a dirty sock
by any other signature shall stink the same!

Yael Artzy <yael.artzy@gmail.com>

Sun, Jun 3, 2007 at 5:06 AM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hello everyone, here are my short answers:

1. What are your main interests?

My main interests are population dynamics, ecology, evolution and network theory.

2. What sorts of expertise can you bring to the group?

Initially I studied mathematics and later on theoretical biology. I have experience with programming (especially with Matlab), and some knowledge in Theoretical Ecology and Evolution and Network theory.

3. What do you hope to get out of the CSSS?

Generally I'd say I'm hoping to learn and experience as much as I can... This is a great opportunity to meet and work with people from areas I'm normally not in close contact with. Especially, I'm looking forward to hearing new ideas and different perspectives that people from different fields might have when trying to understand and explain the dynamics of complex systems. I am also looking forward to learning new methods and techniques that are applicable in this area.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

At this point I am still very open to trying almost any thing. I'm hoping that by the end of the first week, after meeting the patricians and hearing different ideas, I will have a clearer answer.

See you all soon,

Yael

On 5/31/07, Daniel Rockmore <dnrockmore@gmail.com> wrote:

[Quoted text hidden]

[Quoted text hidden]

Saleha Habibullah <salehahabibullah@hotmail.com>

Sun, Jun 3, 2007 at 5:27 AM

To: dnrockmore@gmail.com

Cc: salehahabibullah@hotmail.com

Here are my answers:

1. What are your main interests?

The class of probability distributions that is 'Closed Under Inversion' (a new class of distributions that I have developed in my PhD research - work). I have derived some interesting properties of this particular class of continuous distributions, and am interested in (i) investigating the phenomenon of Closure Under Inversion in further detail, and (ii) finding examples of Real - Life situations where the true potential and significance of the concept of Closure Under Inversion can be realized.

2. What sorts of expertise can you bring to the group?

Some knowledge of mathematical statistics;

Fifteen to twenty years of experience in Innovative Projects and Programs for the Enhancement of Statistical Education (This may not fall under the purview of CSSS, but I thought there should be no harm in letting you know what I have been doing for a Lot many years !)

3. What do you hope to get out of the CSSS?

I think that CSSS is going to open a NEW WORLD for me _!

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by summer's end.)

Open to Any project to which I may be able to contribute, but might be more interested in projects involving the fitting of probability distributions to real data, and the like.

Don't miss your chance to WIN \$10,000 and other great prizes from Microsoft Office Live <http://clk.atdmt.com/MRT/go/aub0540003042mrt/direct/01/>

Ryan Chisholm <chisholm@princeton.edu>
 To: Daniel Rockmore <dnrockmore@gmail.com>
 Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Sun, Jun 3, 2007 at 11:47 AM

Hi all,

Looking forward to seeing you all in Santa Fe very soon.

> 1. What are your main interests?

I originally studied mathematics, and after a stint working as a computer programmer I moved on to ecology. I am generally interested in any and all problems in theoretical ecology. My PhD thesis research involves invasive species, carbon sequestration and ecosystem service valuation in the South African Fynbos.

> 2. What sorts of expertise can you bring to the group?

I have a strong background in mathematics and computer programming to

complement my ecological knowledge. I prefer to program in C++, but have used numerous other languages.

> 3. What do you hope to get out of the CSSS?

I hope to meet lots of interesting folks and hear about their own weird and wonderful complex systems. I hope to be exposed to ideas that will stimulate me to think about my own research in new directions.

> 4. Do you have any possible projects in mind for the CSSS? (Recall > that you will all be working in groups on at least one project with > the goal of presenting your progress on the last day and finishing up > a paper by summer's end.)

Hmmm... not yet. I'm open to anything.

Ryan.

Carver Tate <carvertate@gmail.com>

Sun, Jun 3, 2007 at 1:54 PM

To: Ryan Chisholm <chisholm@princeton.edu>

Cc: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hello, here are my answers...

1. What are your main interests?

My interests include the effects of technology on society (both past and present), the problem of information overload in society and how we might create new ways of processing information to make it more manageable, and developing a more interconnected approach to globalization studies that reflects how each element of globalization effects the other.

2. What sorts of expertise can you bring to the group?

Unfortunately I do not have a background in math or computer programming, but I do come from a strong liberal arts background with knowledge in areas of political science, development, globalization studies, media studies, technology studies, and am well read in the less mathematical aspects of complexity theory.

3. What do you hope to get out of the CSSS?

I see complexity theory relating to my three areas of interest in different ways. With respect to the effects of technology on society, technological innovation and diffusion has followed the traditional S shaped curve and has been shown to mimic the Kondratiev wave. If these patterns are studied more in-depthly it might be possible to make more accurate projections about whether the rate of technological growth and innovation will remain the same or increase in the future. In terms of information overload, I think complexity theory can offer new ways of classifying how "complex" a given piece of information is and offer the simplest way of navigating it. Visual simulations of complex information can also offer a new and more easily digestible format, the same way a traditional x-y graph makes it easier to see the behavior and draw conclusions about a function. Finally, up until this point globalization studies have focused on specific parts of globalization such as economics or culture, but there has yet to be an approach that tries to see how all aspects of globalization are connected and effect one another. I think complexity theory offers the

best method for trying to synthesize these different areas and creating a more holistic approach, viewing globalization as more of a complex adaptive system.

4. Do you have any possible projects in mind for the CSSS?

Personally I would like to apply complexity theory to areas that I have not seen it used in yet such as political science and globalization studies. In terms of political science I could see CT being used to try and understand how different political movements/parties are formed and how the political system acts as a complex adaptive system. In terms of globalization studies, please see my answer to number one. I would be interested in working with people who have more of a math and computer background to try and model these areas as well.

See you soon!

- Carver

--

"There is no safety in unlimited technological hubris." - McGeorge Bundy

Natasha Khan <khanatasha@gmail.com>

Sun, Jun 3, 2007 at 4:50 PM

To: Csss-sf-07@santafe.edu

1. What are your main interests?

Basically, a pure biotechnologist by heart & mind, but my gearing interest is in the holistic approach of systems biology to understand the interplay of different hierarchies of biological information. Macromolecular complexes, regulatory/cell signaling networks, structure & dynamics of biological systems (particullary nerve & immune systems) and the leading-edge technologies of genomics, proteomics attract my attention.

2. What sorts of expertise can you bring to the group?

Well not an expert of anything but I have basic experince of biotech-related techniques in the fields of molecular biology, microbiology, and immunology. I have a research experince in theoretical structural biology and have worked on related bioinformatics softwares & biological databases. But as far as Complexity is concerned, my concepts need adequate grooming.

3. What do you hope to get out of the CSSS?

I am hoping for a very interactive interdisciplinary scientific culture at CSSS. As a voracious learner, I would love to take further doses of mathematical & statistical modeling, a bit refinement of network theory & dynamics, in order to better understand its application in systems biology. From CSSS this june, I am determined to get as much as possible. In the long-run, CSSS is going to shape my knowledge & future research studies.

4. Do you have any possible projects in mind for the CSSS? (Recall that you will all be working in groups on at least one project with the goal of presenting your progress on the last day and finishing up a paper by sumer's end.)

[Quoted text hidden]

Csss-sf-07 mailing list

Csss-sf-07@santafe.edu

<http://www.santafe.edu/mailman/listinfo/sss-sf-07>

amelie.veron@laposte.net <amelie.veron@laposte.net>

Sun, Jun 3, 2007 at 5:05 PM

To: dnrockmore <dnrockmore@gmail.com>

Cc: csss-sf-07 <csss-sf-07@santafe.edu>

Hi everybody !

Better late than never, here are my answers:

> 1. What are your main interests?

Evolution: of genomes, of organisms, of ecosystems: trying to understand it through modeling and comparison with known data.

> 2. What sorts of expertise can you bring to the group?

I was trained in bioinformatics, so I know about sequence analysis (comparison, molecular evolution, alignment ..), phylogeny, scripting languages (perl and awk mainly). I also have some experience with modeling and running simulations.

> 3. What do you hope to get out of the CSSS?

Broadened and solid knowledge about modeling techniques across fields of use, ideas for the future, friendly contacts in diverse disciplines, and generally, a more open/aware mind.

> 4. Do you have any possible projects in mind for the CSSS?

(Recall

> that you will all be working in groups on at least one project with

> the goal of presenting your progress on the last day and finishing up

> a paper by summer's end.)

I don't have a specific subject, but I'd be very happy to work on subjects such as modeling and simulating the evolution of systems (be it genomes, societies or financial markets)

See you all tonight !

Amelie

Créez votre adresse électronique prenom.nom@laposte.net

1 Go d'espace de stockage, anti-spam et anti-virus intégrés.

Juergen Pahle <juergen@pahle.de>

Sun, Jun 3, 2007 at 7:18 PM

To: Daniel Rockmore <dnrockmore@gmail.com>

Cc: csss-sf-07@santafe.edu, Ginger Richardson <grr@santafe.edu>

Hi there,

> 1. What are your main interests?

(Approximate) stochastic and hybrid simulation/analysis of biochemical networks, transition from stochastic to quasi-deterministic behavior in those networks and information transfer in cell signaling pathways

> 2. What sorts of expertise can you bring to the group?

Stochastic simulation methods commonly used in computational biochemistry, some information theory, COPASI (www.copasi.org), Octave, C++

> 3. What do you hope to get out of the CSSS?

I hope I will get a broad overview of basic and innovative ideas in the Complex Systems' arena, but first of all I hope I will meet nice people to work with and share ideas

> 4. Do you have any possible projects in mind for the CSSS? (Recall
> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by summer's end.)

Well, obvious targets for me would be the border between stochastic and (quasi-)deterministic behavior and information transfer in biochemical networks (see 1), but I am very open for other ideas as well.

I look forward to meeting you all (in 10 minutes :-)

Best,
Juergen

Johann, Tim <tim.johann@eml-r.villa-bosch.de>

Mon, Jun 4, 2007 at 1:11 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Hi Daniel, Hi All,

Sorry for being late

1. What are your main interests?

My main research interest is (in general) the dependence of dynamical networks on their constituents. It is specifically about metabolic networks, and how the inhibition of some reactions or blocking certain metabolites can influence the networks' dynamics in terms of chaos/order. Further scientific interests are e.g. proto-life, evolution of metabolic networks, origins of life and such...

2. What sorts of expertise can you bring to the group?

I have long experience in C/C++ programming, and an a little shorter one in FORTRAN, specifically in computer simulation. I looked into Logo and think I could help with questions of people less experienced in programming. I worked in several jobs in UNIX/Linux programming, networking and administration. Also there is some background in nonlinear dynamics.

3. What do you hope to get out of the CSSS?

Some inspiration for my thesis (see above).
Learn to know new people and what they're doing. What methods they are using to tackle complexity.
Have some more gaps in my knowledge filled.

4. Do you have any possible projects in mind for the CSSS?

I am also interested in the evolution of 'proto-life', and the question bothering me is:
How did metabolic networks, with their special features (scale-free, small-world), arise from 'random' networks.
What hypothetical evolutionary rules lead to that, which are physically meaningful.

Maybe this has already been answered in a way. If so, could somebody point me to a publication??

Greets,
and I hope to see some comments on the project proposal.

Tim

jvicente@santafe.edu <jvicente@santafe.edu>
To: Daniel Rockmore <dnrockmore@gmail.com>

Mon, Jun 4, 2007 at 2:54 AM

Hi all ,

> 1. What are your main interests?

> I'm a physicist with some experience in the financial environment and currently working on econophysics , so i'm intersted in any stuff related to finance , statistical physics and complex systems applied to social networks.

> 2. What sorts of expertise can you bring to the group?

> my expertise is mainly related to the modelling of financial systems , and more in concrete the statistical approach to the order book.

> 3. What do you hope to get out of the CSSS?

> I hope some very intersting people and laern about statistical modelling and complex systems in general.

> 4. Do you have any possible projects in mind for the CSSS? (Recall

> that you will all be working in groups on at least one project with
> the goal of presenting your progress on the last day and finishing up
> a paper by sumer's end.)

I have one project in mind about networks and lead lagger behavior on finance.

>
> I'm looking forward to meeting you all. Best wishes for smooth travel.

>
> Dan Rockmore
> Director, 2007 SFI CSSS

[Quoted text hidden]

k.fortney@utoronto.ca <k.fortney@utoronto.ca>
To: dnrockmore@gmail.com, csss-sf-07@santafe.edu

Mon, Jun 4, 2007 at 9:44 AM

Hi all,

> 1. What are your main interests?

Learning algorithms for computational neuroscience. In particular, integrating ideas from machine learning and control theory to build models of general sensorimotor learning in the brain.

> 2. What sorts of expertise can you bring to the group?

Information theory, control theory, learning algorithms for computational neuroscience.

> 3. What do you hope to get out of the CSSS?

Well, I hope to meet lots of interesting people and learn all about their research!

Also, I'd like to learn a lot more mathematical biology - in

particular, evolutionary dynamics and modeling cell aging and death.

> 4. Do you have any possible projects in mind for the CSSS?

Within neuroscience, I'm interested in studying properties of networks of aging cells in the brain (e.g. what happens to learning?)

Outside of my thesis area, I'd be happy to do a project in the general area of evolutionary dynamics, a subject which I am very interested in but fairly new to... anyone have any good ideas?

Regards,
Kristen

Luis Pinzón <lpinzon@uniandes.edu.co>

Mon, Jun 4, 2007 at 9:22 AM

To: Daniel Rockmore <dnrockmore@gmail.com>, csss-sf-07@santafe.edu

Cc: Ginger Richardson <grr@santafe.edu>

1. What are your main interests?

I am particularly interested in learning about how complexity science can be useful to understand and deal with complex behavior in social and natural environments. I also want to understand how the structure of networks can contribute to individual and organizational learning. Additionally, I am interested in the evolution of cooperation, reciprocity and the use of norms of justice among individuals who form part of a community.

2. What sorts of expertise can you bring to the group?

I do not consider myself an expert in anything. I just have some experience in organizing networks of people, in promoting the participation of people in these networks and in trying to promote learning through networks. I have worked in conflict resolution during the last years (trying to promote cooperation and to help people improve their conflict resolution skills). I also have some experience in systems dynamics.

3. What do you hope to get out of the CSSS?

I hope I will get a broad view of the foundations of complexity science, and to understand its potential. I would like to get a good perspective of the possibilities for applying complexity science in the social domain.

4. Do you have any possible projects in mind for the CSSS?

I am open to different possibilities. However, I would prefer to work in a multidisciplinary group so that I can learn from others and contribute to the work of others. Probably I would prefer a project that involves human interactions. As I mentioned before, right now I am interested in understanding how the structure of networks can contribute to individual and organizational learning, but I am open to other topics.

Luis Pinzon

