

Mohammad Haris Baig

CONTACT INFORMATION	HB 6211 Sudikoff Department of Computer Science Dartmouth College Hanover, NH 03755 USA	<i>Voice:</i> (603) 277-0206 <i>E-mail:</i> haris@cs.dartmouth.edu <i>Webpage:</i> www.cs.dartmouth.edu/~haris
RESEARCH INTERESTS	Deep learning, video understanding, image understanding, image and video compression, pixel-level prediction, depth estimation, grayscale image colorization, image inpainting, generative models of images and videos, computer vision applications for augmented reality, virtual reality and mobile.	
EDUCATION	Dartmouth College , Hanover, New Hampshire USA Ph.D. student, Computer Vision and Machine Learning, September 2012 (expected graduation date: May 2017) Advisor: Dr. Lorenzo Torresani Thesis topic: Learning-based approaches for pixel-level prediction Lahore University of Management Sciences (LUMS) , Lahore, Punjab Pakistan B.S., Computer Science , May, 2012	
HONORS AND AWARDS	2 nd place in "rgb2depth" category of Reconstruction Meets Recognition Challenge (RMRC 2014) Dartmouth: Best Poster Presentation at Computer Science Research Symposium (CSRS 2013) LUMS: Deans Honor List 2011, 2012 LUMS: Senior year thesis ranked amongst top 3 from all presented in Computer Science 2012 LUMS: First prize poster competition 'Mathematical Modelling for HIV with SIR model'	
PUBLICATIONS	Baig, M.H. , Torresani, L. Colorization for Image Compression. Accepted with minor revisions at CVIU Special Issue on Deep Learning. Ahmed, K., Baig, M.H. , Torresani, L. Network of Experts for Large-Scale Image Categorization. ECCV (2016) Baig, M.H. , Torresani, L. Coupled Depth Learning. WACV (2016). Baig, M.H. , Jagadeesh, V., Piramithu, R., Bhardwaj A., Di W., Sundaresan N. 2014. Im2depth: Scalable Exemplar Based Depth Transfer. WACV (2014) Zaheer, A., Akhter, I., Baig, M.H., Marzban, S., Khan, S. 2011. Multiview structure from motion in trajectory space. In: Proc. ICCV. (2011)	
PATENTS	Bhardwaj, A; Baig, M.H., Piramuthu, R., Jagadeesh, V, Di, W. Estimating depth from a single image. 2016, US Patent 9,275,078.	

INTERNSHIPS

Summer 2015 - Fall 2015, Visual Computing Lab, Intel

Mentored By: Dr. Vladlen Koltun

Project: Developing approaches for handling problems in image and video compression .

Summer 2014, Disney Research Pittsburgh

Mentored By: Dr. Paulo Gotardo

Project: Estimation of 3D Structure and Reflectance properties for Dynamic Facial Capture via photometric stereo

Summer 2013, Ebay Research Labs

Mentored By: Dr. Vignesh Jagadeesh

Project: Estimating the depth map from a single view of an image by using large datasets.

Google Summer of Code 2011, OpenCV

Mentored By: Dr. Caroline Pantofaru

Project: Generating training pipeline for 'Real time human pose recognition in parts from single depth Image'

RESEARCH EXPERIENCE

Mentored By: Dr. Adnan Khan

Oct 2012 - May 2012

Project: 'Automated analysis of RFLP gel images for Hepatitis C detection and strain identification'

Mentored By: Dr. Usman Qazi

Sept 2011 - Dec 2011

Project: 'Automated detection of lung nodules in CT scan images'

Mentored By: Dr. Sohaib Khan , Aamer Zaheer

Jan 2012 - May 2012

Project: 'Improvement of depth resolution of the Kinect sensor'

Mentored By: Dr. Sohaib Khan and Dr. Abubakr Muhammad

Sept 2011- May 2012

Project : 'Real Time Apparel Visualization with Kinect'

TEACHING ASSISTANT

Dartmouth College,

Sept, 2012 - Present

Hanover, New Hampshire USA.

Deep Learning (Jan 2017 - Mar 2017)

Machine Learning and Statistical Data Analysis (Jan 2015 - Mar 2015)

Computer Vision (Sept 2013 - Nov 2013)

Machine Learning and Statistical Data Analysis (Jan 2013 - Mar 2013)

Problem Solving with Object Oriented Programming (Sept 2012 - Dec 2012)

Lahore University of Management Sciences,

Jan, 2010 - May 2011

Lahore, Punjab. Pakistan.

Computational Problem Solving with MATLAB (Jan 2010 - May 2010)

Introduction to Programming with C++ (Aug 2010 - Dec 2010)

Data Structures with C++ (Jan 2011 - May 2011)

SERVICE & PROFESSIONAL ACTIVITIES

Served as reviewer for BMVC (2016, 2015)

Served as reviewer for Journal IEEE TCSVT. (2016)

Organized Computer Science Research Symposium (CSRS) 2015.