ANKAN BANSAL

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Website

CURRENT RESEARCH INTERESTS

Multi-modal Learning, Scene Understanding, Vision and Language

EDUCATION

University of Maryland, College Park, MD, USA   *August 2015 - present*
Degree: Ph.D., Electrical and Computer Engineering
Advisor: Rama Chellappa

Indian Institute of Technology, Kanpur, India   *July 2010 - June 2015*
Degree: B.Tech. and M.Tech. (Dual Degree), Electrical Engineering
Advisor: K S Venkatesh

PUBLICATIONS

Detecting Human-Object Interactions via Functional Generalization
Ankan Bansal, Sai Saketh Rambhatla, Abhinav Shrivastava, Rama Chellappa
Pre-print, arXiv:1904.03181

A Fast and Accurate System for Face Detection, Identification, and Verification
Rajeev Ranjan, Ankan Bansal, Jingxiao Zheng, Hongyu Xu, Joshua Gleason, Boyu Lu, Anirudh Nanduri, Jun-Cheng Chen, Carlos D. Castillo, Rama Chellappa
IEEE Transactions on Biometrics, Behavior, and Identity Science (T-BIOM), 2019 , arXiv:1809.07586

Zero-Shot Object Detection
Ankan Bansal, Karan Sikka, Gaurav Sharma, Rama Chellappa, Ajay Divakaran
European Conference on Computer Vision (ECCV), 2018, link

Crystal Loss and Quality Pooling for Unconstrained Face Verification and Recognition
Rajeev Ranjan, Ankan Bansal, Hongyu Xu, Swami Sankaranarayanan, Jun-Cheng Chen, Carlos D Castillo, Rama Chellappa
Pre-print, arXiv:1804.01159

Deep Features for Recognizing Disguised Faces in the Wild
Ankan Bansal, Rajeev Ranjan, Carlos D. Castillo, Rama Chellappa
IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2018, link

Predicting Dynamical Evolution of Human Activities from a Single Image
Suhas Lohit, Ankan Bansal, Nitesh Schroff, Jaishanker Pillai, Pavan Turaga, Rama Chellappa
IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2018, link

Proximity-Aware Hierarchical Clustering of Unconstrained Faces
Wei-An Lin, Jun-Cheng Chen, Rajeev Ranjan, Ankan Bansal, Swami Sankaranarayanan, Carlos D. Castillo, Rama Chellappa
Image and Vision Computing (IVC), 2018

UPSET and ANGRI: Breaking High Performance Image Classifiers
Sayantan Sarkar, Ankan Bansal, Upal Mahbub, Rama Chellappa
Pre-print, arXiv:1707.01159

Deep Learning for Understanding Faces
Rajeev Ranjan, Swami Sankaranarayanan, Ankan Bansal, Navaneeth Bodla, Jun-Cheng Chen, Vishal M. Patel, Carlos D. Castillo, Rama Chellappa
IEEE Signal Processing Magazine, 2017, link

The Do's and Don'ts for CNN-based Face Verification
Ankan Bansal, Carlos Castillo, Rajeev Ranjan, Rama Chellappa
International Conference on Computer Vision (ICCV) Workshops, 2017, arXiv:1705.07426

UMDFaces: An Annotated Face Dataset for Training Deep Networks
Ankan Bansal, Anirudh Nanduri, Carlos Castillo, Rajeev Ranjan, Rama Chellappa
International Joint Conference on Biometrics (IJCB), 2017, arXiv:1611.01484

People Counting in High Density Crowds from Still Images
Ankan Bansal, K. S. Venkatesh
International Journal of Computer and Electrical Engineering, 2015 Vol. 7(5), arXiv:1507.08445

INTERNSHIPS

Amazon AWS AI, Pasadena, USA *May 2019 - August 2019*
Advisors: Yuting Zhang, Vijay Mahadevan, Stefano Soatto
Topic: Visual Question Answering

Amazon AWS Deep Learning, Seattle, USA *May 2018 - August 2018*
Advisors: Joaquin Zepeda, Avinash Ravichandran, Stefano Soatto
Topic: Semi-supervised learning

SRI International, Princeton, USA *May 2017 - August 2017*
Advisor: Ajay Divakaran
Topic: Zero-shot Object Detection

HONORS AND AWARDS

- Clark School of Engineering Distinguished Graduate Fellowship, University of Maryland, 2015-2016
- MCM Scholarship, IIT Kanpur, 2010-2014
- National Talent Search Examination (NTSE) scholarship by Government of India, 2008-2010
- Science Student Award by State Government of Uttar Pradesh, 2008

MASTERS THESIS

Duration: May 2014 - June 2015
Topic: Estimating Number of People in Very High Density Crowds
Supervisor: K. S. Venkatesh

TEACHING EXPERIENCE

I have been a Teaching Assistant for the following courses:
Control Systems Laboratory (IIT Kanpur, Fall 2014), Convex Optimization (IIT Kanpur, Spring 2015)

RELEVANT COURSES

University of Maryland, College Park
Computer Vision, Deep Learning, Statistical Pattern Classification, Robotics and Perception, Image Understanding, Random Processes, Estimation and Detection Theory, Information Theory

Indian Institute of Technology, Kanpur
Convex Optimization, Artificial Intelligence Planning, Statistical Signal Processing, Kalman Filtering

SKILLS

Programming Languages and Libraries: Python, C/C++, PyTorch, Tensorflow, Caffe
Human Languages: Hindi (native), English, Spanish (beginner), Russian (beginner)

POSITIONS OF RESPONSIBILITY

Coordinator, Quiz Events, Antaragni 2012 (inter-collegiate cultural festival of IIT Kanpur)
Coordinator, Crypto, Techkriti 2012 (inter-collegiate technical festival of IIT Kanpur)
Student Guide and Link Student, Counselling Service, IIT Kanpur, 2011-2012

OTHER INTERESTS

I read. I write. I quiz. And I am teaching myself to play the violin.