Ankan Bansal

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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., Electrical Engineering

SELECTED PUBLICATIONS

Visual Question Answering on Image Sets

Ankan Bansal, Yuting Zhang, Rama Chellappa

Under Submission

Spatial Priming for Detecting Human-Object Interactions

Ankan Bansal, Sai Saketh Rambhatla, Abhinav Shrivastava, Rama Chellappa Under Submission

Removing Shortcuts and Resolving Scale Mismatch for Jigsaw

Shlok Mishra, Anshul Shah, Ankan Bansal, Abhishek Sharma, Abhinav Shrivastava, David Jacobs Under Preparation

Rethinking Object Detectors for Human Object Interaction Detection

Sai Saketh Rambhatla, Ankan Bansal, Abhinav Shrivastava, Rama Chellappa

Under Preparation

How are attributes expressed in face DCNNs?

Prithviraj Dhar, Ankan Bansal, Carlos D. Castillo, Joshua Gleason, P. Jonathon Phillips, Rama Chellappa IEEE International Conference on Automatic Face & Gesture Recognition (FG), 2020, arXiv:1910.05657

Detecting Human-Object Interactions via Functional Generalization

Ankan Bansal, Sai Saketh Rambhatla, Abhinav Shrivastava, Rama Chellappa

Thirty-Fourth AAAI Conference on Artificial Intelligence, 2020, 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

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

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

Salesforce Einstein AI, Palo Alto, USA

Advisors: Nikhil Naik, Richard Socher Amazon AWS AI, Pasadena, USA

Advisors: Yuting Zhang, Vijay Mahadevan, Stefano Soatto

Amazon AWS Deep Learning, Seattle, USA

Advisors: Joaquin Zepeda, Avinash Ravichandran, Stefano Soatto

SRI International, Princeton, USA

Advisor: Ajay Divakaran

Topic: Grounding Visual Concepts

May 2019 - August 2019

Topic: Visual Question Answering

May 2018 - August 2018

Topic: Semi-supervised Learning

May 2017 - August 2017
Topic: Zero-shot Learning

MASTERS THESIS

Topic: Estimating Number of People in Very High Density Crowds

Supervisor: K. S. Venkatesh

HONORS AND AWARDS

- Jacob K. Goldhaber Travel Grant, University of Maryland, 2017
- 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

RELEVANT COURSES

Computer Vision, Deep Learning, Robotics and Perception

Statistical Pattern Classification, Random Processes, Estimation & Detection Theory, Information Theory, Convex Optimization, Kalman Filtering

SKILLS

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

SERVICE

Reviewer for vision conferences (CVPR, ICCV, AAAI, etc.), and journals (IJCV, TIP, T-BIOM, etc.)

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.