

ANKAN BANSAL

Senior Applied Scientist, Amazon AWS AI

 ankanbansal.com

 ankanbansal

CURRENT RESEARCH INTERESTS

Multi-modal Learning, Vision+Language, Efficient data sourcing, annotation, and utilization

EXPERIENCE

AWS AI, Pasadena, USA *August 2020 -*
Senior Applied Scientist, *Dec 2022 -*
Applied Scientist, *Aug 2020 - Dec 2022*

INTERNSHIPS

Salesforce Einstein AI, Palo Alto, USA *September 2019 - November 2019*
Amazon AWS AI, Pasadena, USA *May 2019 - August 2019*
Amazon AWS Deep Learning, Seattle, USA *May 2018 - August 2018*
SRI International, Princeton, USA *May 2017 - August 2017*

EDUCATION

Doctorate (PhD), Electrical and Computer Engineering *July 2020*
University of Maryland, College Park, MD, USA
Advisor: Rama Chellappa

Master of Science (MS), Electrical and Computer Engineering *July 2019*
University of Maryland, College Park, MD, USA
Advisor: Rama Chellappa

Master of Technology (M.Tech.), Electrical Engineering *June 2015*
Indian Institute of Technology, Kanpur, India

Bachelor of Technology (B.Tech.), Electrical Engineering *June 2015*
Indian Institute of Technology, Kanpur, India

SELECT PUBLICATIONS AND PATENTS

DocTr: Document Transformer for Structured Information Extraction in Documents

Haofu Liao, Aruni RoyChowdhury, Weijian Li, *Ankan Bansal*, Yuting Zhang, Zhuowen Tu, Ravi Kumar Satzoda, R. Manmatha, Vijay Mahadevan
International Conference on Computer Vision (ICCV), 2023

Object-Aware Cropping for Self-Supervised Learning

Shlok Kumar Mishra, Anshul Shah, *Ankan Bansal*, Janit K Anjaria, Abhyuday Narayan Jagannatha, Abhishek Sharma, David Jacobs, Dilip Krishnan
Conference on Lifelong Learning Agents (CoLLAs), 2023, *Journal Track*, [link](#)

Pose and Joint-Aware Action Recognition

Anshul Shah, Shlok Mishra, *Ankan Bansal*, Jun-Cheng Chen, Rama Chellappa, Abhinav Shrivastava
WACV 2022, [link](#)

Zero-shot Object Detection

Karan Sikka, Ajay Divakaran, *Ankan Bansal*
US Patent 11,055,555, 2021, [link](#)

Deep CNN Face Recognition: Looking at the Past and the Future

Ankan Bansal, Rajeev Ranjan, Carlos D Castillo, Rama Chellappa
Deep Learning-Based Face Analytics, 2021, [link](#)

Visual Question Answering on Image Sets

Ankan Bansal, Yuting Zhang, Rama Chellappa
European Conference on Computer Vision (ECCV), 2020, [link](#)

Deep CNN-Based Face Recognition

Ankan Bansal, Rajeev Ranjan, Carlos D Castillo, Rama Chellappa
Computer Vision: A Reference Guide, 2020, [link](#)

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, [link](#)

Detecting Human-Object Interactions via Functional Generalization

Ankan Bansal, Sai Saketh Rambhatla, Abhinav Shrivastava, Rama Chellappa
Thirty-Fourth AAAI Conference on Artificial Intelligence, 2020, [link](#)

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, [link](#)

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](#)

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, [link](#)

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, [link](#)

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

SKILLS

Programming Languages and Libraries: Python, PyTorch, Tensorflow, Caffe

Human Languages: Hindi (native), English, Spanish (beginner)

SERVICE

Co-instructor for Machine Learning and Data Mining Course at Caltech (2022)

Reviewer for CV and ML conferences (CVPR, ICLR, etc.), and journals (IJCV, TIP, 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 am a [reader](#), a [quizzier](#), a violinist, and an archer.