

# Akash Gupta

📍 950 W Linden St, Apt 68, Riverside, California 92507, USA  
✉ agupt013@ucr.edu 📞 +1 (951) 462-8264 🌐 <http://www.akashgupta.com>

## RESEARCH INTERESTS

- Computer Vision, Deep Learning, Domain Adaptation, Transfer Learning, Adversarial Learning
- Video Generation, Enhancement and Representation learning.

## EDUCATION

### University of California, Riverside, California, USA

- Ph.D. in Electrical Engineering Apr 2018 – Jul 2021  
(Expected)
  - Advisor: Prof. Amit Roy-Chowdhury
  - GPA: 3.8 / 4.0
- M.S. in Electrical Engineering Sep 2016 – Mar 2018
  - Advisor: Prof. Amit Roy-Chowdhury
  - Thesis: Deep Learning Approaches for Identity Verification in Renaissance Portraits
  - Cumulative GPA: 3.8 / 4.0

### Visvesvaraya National Institute Of Technology, Nagpur, Maharashtra, India

- B.Tech. in Electronics and Communications Sep 2010 – May 2014
  - Advisor: Prof. Ashwin Kothari
  - Thesis: Buccinatory Sensing Driven Artificial Companion
  - Cumulative GPA: 8.4 / 10.0

## RESEARCH EXPERIENCE

### JD.com AI Research, Mountain View

CA, USA

- Research Intern Jun 2020 – Dec 2020
  - Group: Computer Vision Group
  - Mentor: Dr. Jingen Liu
  - Project: Egocentric Action Anticipation

### MayaChitra Inc., Santa Barbara

CA, USA

- Research Intern Apr 2018 – Sep 2018
  - Mentors: Prof. B.S. Manjunath and Dr Lakshmanan Natrajan
  - Project: Classification and Detection of Malware using Computer Vision
  - Focus: Malware Analysis, Deep Learning, Image Processing

### University of California, Riverside

CA, USA

- Graduate Student Researcher Apr 2017 – Present
  - Group: Video Computing Group
  - Advisor: Prof. Amit Roy-Chowdhury
  - Focus: Computer Vision and Machine Learning

### Research Center Imarat (DRDO), Hyderabad

Telangana, India

- Summer Research Intern May 2013 – Jul 2013
  - Mentor: B. Someswara Rao, Scientist F
  - Project: Enhancing Frequency Resolution using FFT in Radar Seeker
  - Focus: Signal Processing and Communication

## TEACHING EXPERIENCE

### University of California, Riverside

CA, USA

- Teaching Assistant Mar 2020 – May 2020
  - Course: Advanced Computer Vision (EE240)
  - Instructor: Prof. Amit Roy-Chowdhury
- Teaching Assistant Mar 2020 – May 2020
  - Course: Introduction to Deep Learning (EE260)
  - Instructor: Prof. Samet Oymak
- Teaching Assistant Mar 2019 – May 2019
  - Course: Advanced Computer Vision (EE240)
  - Instructor: Prof. Amit Roy-Chowdhury

**WORK EXPERIENCE**

**Standard & Poor's Global Market Research, Gurgaon**

Harayana, India  
Jun 2014 – Jul 2016

- **Quality Analyst**
  - Projects: Real-Time Desktop Application and Market Data Reporting System
  - Manager: Kristina Younker

**SELECTED PUBLICATIONS**

- [1] Akash Gupta, Abhishek Aich, and Amit K. Roy-Chowdhury, "ALANET: Adaptive Latent Attention Network for Joint Video Deblurring and Interpolation", *ACM International Conference on Multimedia (ACM MM)*, 2020. **(Oral)**
- [2] Akash Gupta\*, Rameswar Panda\*, Sujoy Paul, Jianming Zhang and Amit K. Roy-Chowdhury, "Adversarial Knowledge Transfer from Unlabeled Data", *ACM International Conference on Multimedia (ACM MM)*, 2020. (\* joint first authors)
- [3] Abhishek Aich\*, Akash Gupta\*, Rameswar Panda, Rakib Hyder, M. Salman Asif, and Amit K. Roy-Chowdhury, "Non-Adversarial Video Synthesis with Learned Priors", *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020. (\* joint first authors)
- [4] Akash Gupta, Abhishek Aich, Kevin Rodriguez, G. Venugopala Reddy, and Amit K. Roy-Chowdhury, "Deep Quantized Representation for Enhanced Reconstruction", *ISBI 2020 Workshop*, 2020.
- [5] Akash Gupta, N. C. Mithun, Conrad Rudolph, and Amit Roy-Chowdhury, "Deep Learning based Identity Verification in Renaissance Portraits", ICME 2018

**AWARDS & SCHOLARSHIPS**

- **Deans Distinguished Fellowship Award**, University of California, Riverside 2018 – 2019

**TECHNICAL SKILLS**

- **Programming Skills:** Python (proficient) , MATLAB (proficient), C++ (novice)
- **Computing Libraries:** NumPy, OpenCV, SQLite, Pillow, Scikit-Learn, Flask
- **Deep Learning Frameworks:** PyTorch, Caffe, TensorFlow (Keras)
- **Databases:** MySQL, Microsoft SQL

**GRADUATE COURSES**

- Adv. Computer Vision • Computational Learning • Information Theory • Pattern Recognition • Convex Optimization • Intermediate Data Structures and Algorithm • Adv. Digital Signal Processing • State and Parameter Estimation • Stochastic Processes • Math. Methods for EE

**PROFESSIONAL ACTIVITIES**

- Conference Reviewer:**  
IEEE ICIP 2018/2019/2020, IEEE ICPR 2020, IEEE ECCV2020–MVA, IEEE CVPR 2021
- Journal Reviewer:**  
IEEE TPAMI
- Program Committee Member:**  
IEEE ECCV2020–MVA

**REFERENCES**

Available on request.