Aniket Rege

Department of Computer Sciences
University of Wisconsin-Madison
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Google Scholar
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Education

University of Wisconsin-Madison *2023 - present*
PhD in Computer Sciences
Advisor: Prof. Ramya Vinayak

University of Washington *2021 - 2023*
MS in Electrical and Computer Engineering
Advisor: Prof. Ali Farhadi

National Institute of Technology Karnataka *2014 - 2018*
B.Tech in Electronics and Communication Engineering
Advisor: Prof. Muralidhar Kulkarni

Work Experience

NVIDIA, Redmond *June - Sept, 2022*
Applied Research Intern, Deep Learning for Autonomous Vehicles
Advisors: Dr. Nikolai Smolyanskiy & Dr. Stan Birchfield

Samsung Research India, Bangalore *2018 - 2021*
AI Camera Research Engineer in Visual Intelligence Group
Advisors: Sudha Velusamy & Dr. Shankar Venkatesan

Publications

Conference Publications

* - equal contribution

5. **AdANNS: A Framework for Adaptive Semantic Search**.
Aniket Rege*, Aditya Kusupati*, Sharan Ranjit S, Alan Fan, Qingqing Cao, Sham Kakade, Prateek Jain, and Ali Farhadi.
*Neural Information Processing Systems (**NeurIPS**), 2023.*

4. **Matryoshka Representation Learning**.
Aniket Rege*, Aditya Kusupati*, Gantavya Bhatt*, Matthew Wallingford, Aditya Sinha, Vivek Ramanujan, William Howard-Snyder, Kaifeng Chen, Sham Kakade, Prateek Jain, and Ali Farhadi.
*Neural Information Processing Systems (**NeurIPS**), 2022.*

3. **Spatio-Temporal Video Representation Learning for AI Based Video Playback Style Prediction**.
Rishubh Parihar*, Gaurav Ramola*, Ranajit Saha, Raviprasad Kini, **Aniket Rege**, and Sudha Velusamy.
*International Conference on Computer Vision (**ICCV W**), 2021.*
SRVU workshop @ ICCV, 2021.

2. **FabSoften: Face beautification via dynamic skin smoothing, guided feathering, and texture restoration**.
Sudha Velusamy, Rishubh Parihar, Raviprasad Kini, **Aniket Rege**.
*Conference on Computer Vision and Pattern Recognition (**CVPR W**), 2020.*
NTIRE workshop @ CVPR, 2020.

1. **QUIC Protocol Performance in Wireless Networks**.
Prashant Kharat*, **Aniket Rege***, Aneesh Goel*, and Muralidhar Kulkarni.
*IEEE International Conference on Communication and Signal Processing (**ICCSP**), 2018.*

Patents

2. **Method and electronic device for detecting candid moment in image frame**.
Aniket Rege*, Gaurav Ramola*, Nikhar Maheshwari*, Sudha Velusamy, Girish Kulkarni, Sai Pranav Mathivanan, Swadha Jaiswal, and Pradeep Kumar Vagireddi.
U.S. Patent App. 17/743,990, filed September 1, 2022.

1. **Method and electronic device for processing facial images**.
   Sudha Velusamy, Rahul Varna, Raviprasad Kini, **Aniket Rege**, Rishubh Parihar, Daeyoung Hyun.
   U.S. Patent 11,335,122, issued May 17, 2022.

Theses

1. **Congestion Control in Wireless Networks**.
   Aniket Rege*, Aneesh Goel*, and Muralidhar Kulkarni.
   Undergraduate Thesis, Electronics and Communication Engineering, NITK Surathkal, 2018.

Selected Awards and Honors

- **CS Departmental Scholarship**, UW-Madison *2023*
- **NeurIPS Scholar Award** *2022*
- **University of Washington Graduate School Award** for NeurIPS '22 *2022*
- **Samsung HQ Best Project Award** as founding member of **Single Take Camera**, the USP of the Galaxy S20 smartphone *2021*
- **Samsung Best Paper Award '19 Finalist** for FabSoften, later published at CVPR '20, selected from all worldwide offices *2019*
- **Samsung India Outstanding Contribution Award** for shipping **AI Beauty Solution** to 50M+ smartphones worldwide *2019*
- **Road to Global Entrepreneurship Summit (GES) '17 national finalist** for *An Analysis of Sleep Hygiene*. Conducted by NITI Aayog under the Government of India. *2017*

Professional Responsibilities

- *Graduate Teaching Assistant*, University of Washington
  - CS 540: Introduction to Artificial Intelligence - Prof. Jerry Zhu *Fall 2023*
- *Graduate Teaching Assistant*, University of Washington
  - CSE 493: Deep Learning - Prof. Ranjay Krishna *Spring 2023*
  - CSE 547: Machine Learning for Big Data - Prof. Tim Althoff *Winter 2023*
  - EE 596: Computer Vision: Classical and Deep Methods - Dr. Stan Birchfield *Fall 2021*
- *Mentor* - supervised two interns in the AI Camera team of the Visual Intelligence Group at SRIB.
  1. **Ankit Pandey**: AI Double Exposure Blending for Galaxy S22. *Apr - Jul 2021*
  2. **Nikhar Maheshwari**: Automated Bokeh Classification for Galaxy S21. *May - Jul 2020*
- *Samsung University Representative* - Technical liason for hiring of students from NITK *2018 - 2021*
- *Undergraduate Teaching Assistantship, Linear Signals and Systems* - Department of ECE, NITK *2015 - 2016*