

# Aniket Rege

Department of Computer Sciences  
University of Wisconsin-Madison  
WI 53703

✉ [aniketr@cs.wisc.edu](mailto:aniketr@cs.wisc.edu)  
🎓 [Google Scholar](#)  
🌐 [Personal Website](#)

## EDUCATION

---

### University of Wisconsin-Madison

*PhD in Computer Sciences*

Advisor: Prof. Ramya Korlakai Vinayak & Prof. Yong Jae Lee

2023 - present

### University of Washington

*MS in Electrical and Computer Engineering*

Advisor: Prof. Ali Farhadi

2021 - 2023

### National Institute of Technology Karnataka

*B.Tech in Electronics and Communication Engineering*

Advisor: Prof. Muralidhar Kulkarni

2014 - 2018

## WORK EXPERIENCE

---

### Meta, Redmond

*Research Scientist Intern, Reality Labs*

Advisors: Dr. Hyo Jin Kim & Dr. Yuning Chai

May - Aug, 2025

### NVIDIA, Redmond

*Applied Research Intern, Deep Learning for Autonomous Vehicles*

Advisors: Dr. Nikolai Smolyanskiy & Dr. Stan Birchfield

June - Sept, 2022

### Samsung Research India, Bangalore

*AI Camera Research Engineer, Visual Intelligence Group*

Advisors: Sudha Velusamy & Dr. Shankar Venkatesan

2018 - 2021

## PUBLICATIONS

---

### Conference Publications

\* - equal contribution

#### 7. **CuRe: Cultural Gaps in the Long Tail of Text-to-Image Models.**

Aniket Rege, Zinnia Nie, Mahesh Ramesh, Unmesh Raskar, Zhuoran Yu, Aditya Kusupati, Yong Jae Lee, Ramya Korlakai Vinayak.

*IEEE/CVF International Conference on Computer Vision (ICCV), 2025*

*Demographic Diversity in Computer Vision workshop @ CVPR, 2025 (Oral)*

#### 6. **PAL: Sample-Efficient Personalized Reward Modeling for Pluralistic Alignment.**

Daiwei Chen, Yi Chen, Aniket Rege, Zhi Wang, Ramya Korlakai Vinayak.

*International Conference on Learning Representations (ICLR), 2025*

*Models of Human Feedback for AI Alignment workshop @ ICML, 2024 (Oral)*

*Workshop on Behavioral Machine Learning @ NeurIPS '24 (Spotlight)*

*Pluralistic Alignment workshop @ NeurIPS '24*

#### 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.*

*Practical ML for Developing Countries workshop @ ICLR 2023 (Oral).*

#### 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.*

*Vision Transformers: Theory and Applications workshop @ NeurIPS, 2022 (Oral).*

*Self-Supervised Learning - Theory and Practice workshop @ NeurIPS, 2022.*

*Computer Vision in the Wild workshop @ ECCV, 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.  
*Structured Representations for Video Understanding 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 workshops (CVPR W), 2020.*  
*New Trends in Image Restoration 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. Yudong Chen Fall 2023, 24
- *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
- *Mentoring*
  1. **Zinnia Nie**, BS Computer Science and Data Science at UW Madison.
  2. **Ankit Pandey (Intern)**: AI Double Exposure Blending for Galaxy S22. Apr - Jul 2021
  3. **Nikhar Maheshwari (Intern)**: Automated Bokeh Classification for Galaxy S21. May - Jul 2020
- *Samsung University Representative* - Technical liason for hiring of students from NITK 2018 - 2021

## EXTRACURRICULARS

---

### Convener and Head, Indian Society for Technical Education, NITK

Apr 2017 - May 2018

Advisor: Dr. Basavaraju Manu, NITK

- Led a team of 100+ students to conduct technical talk and cross-domain technical projects across STEM fields, business, literature, and graphic design.
- Head of the Electrical Engineering special interest group.
- Initiated and organized the university's first cross-campus hackathon during the annual tech fest with SRIB.
- Pioneered NITK's first annual technical club project expo in association with IEEE-NITK.
- Initiated the formation of the club's alumni network on LinkedIn, as well as the club's first summer mentorship program.

### Joint Convener and Head, Engineer (Technical Fest)

Aug - Oct 2017

- Joint head of NITK's annual technical fest, Engineer '17.
- Co-led the Technites committee, a three day expo of EECS projects primarily focused on embedded electronics.

### Performing Artist (Vocals), NITK Music Club

Aug 2016 - May 2018

### Volunteer Work

- *Swachhta Pakhwada*: campus and beach cleanup under the Swach Bharat scheme of the Ministry of Human Resource and Development (MHRD), Government of India. Sept 2016
- *Teacher, Doorstep School*: teaching Math and English to underprivileged children in construction sites around the Aundh Gaon area of Pune, India. May - Jun 2016
- *The Billion Tree Campaign*: planting and taking care of tree saplings over the course of a semester as part of the UN Environment Program (UNEP). Nov 2009