

Aniket Rege

Department of Electrical & Computer Engineering
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🎓 Google Scholar

EDUCATION

University of Washington, Seattle

MS in Electrical and Computer Engineering

Advisor: Prof. Ali Farhadi

2021 - present

National Institute of Technology Karnataka

B.Tech in Electronics and Communication Engineering

Advisor: Prof. Muralidhar Kulkarni

2014 - 2018

WORK EXPERIENCE

NVIDIA, Redmond

Applied Research Intern, Deep Learning for Autonomous Vehicles

Advisors: Dr. Ke Chen, Dr. Nikolai Smolyanskiy & Dr. Stan Birchfield

June - Sept, 2022

Samsung Research India, Bangalore

AI Camera Research Engineer in Visual Intelligence Group

Advisors: Sudha Velusamy & Dr. Shankar Venkatesan

2018 - 2021

PUBLICATIONS

Conference Publications

* - equal contribution

1. **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), 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), 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

3. **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.

2. **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.

1. **Mobile Accessory For 3D Selfie Creation.**

Aniket Rege*, Shankar Venkatesan*, Ankit Jalan*, Mynepalli Siva Chaitanya, Arko Sabui, Rishi Franklin, Viswanath Veera, Abhijeet Singh.
IN 201641031773, issued March 23, 2018.

Theses

1. Congestion Control in Wireless Networks.

Aniket Rege*, Aneesh Goel*, and Muralidhar Kulkarni.

Undergraduate Thesis, Electronics and Communication Engineering, NITK Surathkal, 2017 - 18.

SELECTED AWARDS AND HONORS

- **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 Assistantship** - Electrical and Computer Engineering, University of Washington
 - Signal Processing - Prof. Akshay Gadre Autumn 2022
 - Signal Processing - Prof. Tai Chen Spring 2022
 - Fundamentals of Electrical Engineering - Prof. Karl Bohringer Winter 2022
 - Computer Vision: Classical and Deep Methods - Dr. Stan Birchfield Autumn 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. **Nikhari Maheshwari**: Automated Bokeh Classification for Galaxy S21. May - Jul 2020
- **Samsung University Representative** - Technical liaison for hiring of students from NITK 2018 - 2021
- **Undergraduate Teaching Assistantship, Linear Signals and Systems** - Department of ECE, NITK 2015 - 2016

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