# Aniket Rege

Department of Electrical & Computer Engineering University of Washington, Seattle, WA, USA 98195 

# EDUCATION

# University of Washington, Seattle

2021 - present

MS EE student in Electrical and Computer Engineering

Advisor: Prof. Jenq-Neng Hwang

# National Institute of Technology Karnataka

2014 - 2018

B. Tech in Electronics and Communication Engineering

Advisor: Prof. Muralidhar Kulkarni

# WORK EXPERIENCE

#### NVIDIA AI, Redmond

June - Sept, 2022

Applied Research Intern, Deep Learning Autonomous Vehicles Advisors: Dr. Nikolai Smolyanskiy & Dr. Stan Birchfield

Advisors. Dr. Mkorai Smoryanskry & Dr. Stan Dr.

# 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

1. Matryoshka Representations for Adaptive Deployment.

**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.

Shankar Venkatesan, Ankit Jalan, **Aniket Rege**, 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 \_

• 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	2017

# Professional Responsibilities \_\_\_\_

• Graduate Teaching Assistantship - Electrical and Computer Engineering, Un
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of Sleep Hygiene. Conducted by NITI Aayog under the Government of India.

- Signal Processing - Prof. Akshay Gadre	$Autumn\ 2022$
– Signal Processing - Prof. Tai Chen	$Spring\ 2022$
<ul> <li>Fundamentals of Electrical Engineering - Prof. Karl Bohringer</li> </ul>	$Winter\ 2022$
- 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. 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

# 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

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