Rohan Choudhury

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http://rccchoudhury.github.io

EDUCATION

Carnegie Mellon University Aug 2021 - present
Ph.D, Robotics

- Research focus: efficient video understanding and visual representation learning
- Advised by Prof. Kris Kitani and Prof. László Jeni

California Institute of Technology Sep 2015 - June 2019
B.S, Computer Science
GPA: 3.91/4.00

EMPLOYMENT

Meta Fundamental AI Research (FAIR) May 2024 - Sep 2024
Research Scientist Intern *Menlo Park, CA*

- Worked with Kris Kitani, Jing Huang and Xitong Yang.
- Research focus: Video understanding, efficient transformers

Fujitsu Research of America May 2023 - Aug 2023
Research Scientist Intern *Pittsburgh, PA*

- Worked with Koichiro Niinuma and László Jeni.
- Research focus: Video question answering and long-video understanding.

Nuro Aug 2019 - Aug 2021
Machine Learning Engineer *Mountain View, CA*

- Led work on the machine learning based trajectory prediction system for onroad agents.
- Was personally responsible for org-wide objectives and solving many on-road critical disengagements.
- Mentored several new hires on my team and one intern who received the highest possible rating.

PUBLICATIONS AND PREPRINTS

Don't Look Twice: Faster Video Transformers with Run-Length Tokenization
Rohan Choudhury, Guanglei Zhu, Sihan Liu, Koichiro Niinuma, Kris M. Kitani, László A. Jeni
Neural Information Processing Systems (NeurIPS) 2024 (spotlight, top 10%)

Video Question Answering with Procedural Programs
Rohan Choudhury, Koichiro Niinuma, Kris M. Kitani, László A. Jeni
European Conference on Computer Vision (ECCV), 2024

JaywalkerVR: A VR System for Collecting Safety-Critical Pedestrian-Vehicle Interactions
Kenta Mukoya, Erica Weng, **Rohan Choudhury**, Kris M. Kitani
International Conference on Robotics and Automation (ICRA) 2024

TEMPO: Efficient Multi-View Pose Estimation, Tracking, and Forecasting
Rohan Choudhury, László A. Jeni, Kris M. Kitani
International Conference on Computer Vision (ICCV) 2023

CNN-based Preprocessing to Optimize Watershed-based Cell Segmentation in 3D Confocal Microscopy Images.
Dennis Eschweiler, Thiago V. Spina, **Rohan Choudhury**, Elliot Meyerowitz, Alexandre Cunha, Johannes Stegmaier
IEEE International Symposium on Biomedical Imaging (ISBI), 2019

HONORS & AWARDS

National Science Foundation Graduate Research Fellowship 2023
Langheim Summer Undergraduate Research Fellowship 2018

TEACHING

Teaching Assistant

- *16-720B: Introduction to Computer Vision*, Carnegie Mellon Fall 2022
- *16-824: Visual Learning and Recognition*, Carnegie Mellon Spring 2023
- *CS155: Machine Learning and Data Mining*, Caltech Winter 2019

PROFESSIONAL SERVICE

Reviewer:
International Conference on Computer Vision (ICCV) 2023
European Conference on Computer Vision (ECCV) 2024
Computer Vision and Pattern Recognition (CVPR) 2024, 2025
Neural Information Processing Systems (NeurIPS) 2024
International Conference on Learning Representations (ICLR) 2025

TECHNICAL STRENGTHS

- **Machine Learning Frameworks:** PyTorch, JAX, NumPy
- **Programming Languages:** Python, C++, C, CUDA