

Karun Singh

CORNELL '18 · SOFTWARE ENGINEER AT GROKSTYLE · SAN FRANCISCO

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Education

Cornell University

Ithaca, New York

B.Sc. IN COMPUTER SCIENCE, COLLEGE OF ENGINEERING

Aug 2014 - May 2018

- Merrill Presidential Scholar 2018 [[Cornell Chronicle article](#)], awarded to 1% of Cornell's graduating seniors.
- Jonathan E. Marx Senior Prize, awarded by the CS department; College of Engineering Dean's List, all semesters (GPA: 4.073).

Experience

GrokStyle Inc.

San Francisco, California

SOFTWARE ENGINEER

Aug 2018 - PRESENT

- Contributing to the development of GrokStyle's AI-based Visual Search service, used by global retailers such as IKEA.

Snap Inc.

Los Angeles, California

SOFTWARE ENGINEERING INTERN

Summer 2017

- Summer intern on the Camera Platform team, which powers Snapchat's augmented reality 'filters'.
- Worked on open-ended, research-based tasks in the computer vision domain, with a focus on deployment constraints.

Google

San Francisco, California

SOFTWARE ENGINEERING INTERN

Summer 2016

- Built and demoed a project that integrated Google Wallet's functionality into other customer-facing Google services.

Undergraduate Research

Cornell University

INDEPENDENT RESEARCH PROJECTS

Aug 2017 - May 2018

- Proposed and evaluated techniques to reduce the training cost of data augmentations for neural networks. [Paper at www.karun.in]
- Used convolutional neural networks to visualize the process of pre-mRNA splicing in DNA transcription. [Write-up at www.karun.in]
- Explored unsupervised learning methods for image classification, advised by Professor Bharath Hariharan.

Teaching Assistant

Cornell University

UNDERGRADUATE TA IN THE CS AND ECE DEPARTMENTS

Jan 2016 - May 2018

- TA-ed 4 undergraduate courses: Computer Vision, Algorithms (twice), Database Systems, and Digital Logic & Computer Organization.
- Helped create homework projects, supplementary tutorials, graded assignments and exams, and held weekly office hours.

Projects

Cornell Design & Tech Initiative

Cornell University

TEAM CO-LEAD; PRODUCT MANAGER

Aug 2017 - May 2018

- Co-led an interdisciplinary student-run team that creates technology to address needs on and around Cornell's campus. [[website](#)]
- Helped grow the team from 20 to 63 students, who collectively designed, developed, and shipped 6 products used by 6,000+ users.
- Product Manager for a sub-team of 8 that built an online queueing app for overcrowded TA office hours, now being used in production.

Resistance Racing

Cornell University

ELECTRICAL TEAM

Feb 2016 - May 2018

- Built a real-time telemetry system for the team's battery-electric vehicle, which placed 5th in the Shell Eco Marathon Americas 2018.
- Previously built a Raspberry Pi-based dashboard and logging system, which was mounted on the team's all-electric motorcycle.

Skills

Languages & Technologies

Python, NumPy/SciPy, TensorFlow, Keras, Node, React, HTML/CSS/JS, SQL, Django, GraphQL, Java, C++

Theoretical Coursework

Analysis of Algorithms, Cryptography, Functional Programming, Applied Logic, Number Theory

High-level Applications

Machine Learning, Computer Vision, Artificial Intelligence, Computational Genetics, Computer Graphics

Low-level Applications

Operating Systems, Database Systems, Embedded Systems, Digital Logic and Computer Organization

Other

Entrepreneurship, Remote Sensing, Human Perception, Politics and Sports, Astronomy, Juggling