

Aneesh Gupta

Mountain View, CA

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EDUCATION

Duke University — *Bachelor of Science (Magna Cum Laude)*

Aug 2018 - Dec 2021

Major in Computer Science. Minor in Mathematics.

GPA: 3.92/4.0

Coursework: Algorithms, Computer Architecture, Discrete Math, Probability, Linear Algebra, Databases, Adv. Software Design, Applied Math, Combinatorics, ML, Artificial Intelligence, Sampling & Markov Chains

WORK EXPERIENCE

Nuro, Inc.

Mountain View, CA

Software Engineer - Perception

Feb 2022 - Present

- Working on ML-driven improvements to the AV's perception and detection systems for rare objects.
- Writing onboard software modules (in **C++**) to detect critical incidents and initiate safety response.
- Responsible for building evaluation frameworks used to measure and iterate on ML model performance.

Facebook, Inc.

Menlo Park, CA

Software Engineering Intern - Networks Infra and Delivery Systems

May 2021 - Aug 2021

- Built a database schema *linting* service to analyze and validate data from networks and data-centers.
- Designing end-to-end API using **Thrift**, **Python**, and **PHP** to expose networks metadata to internal UI.
- Enhanced CI/CD and auditing frameworks to improve test coverage, and reduce false positive errors.

ANB Systems, Inc.

Houston, TX

Software Engineering Intern

May 2020 - Aug 2020

- Enhanced document recognition by improving Python image extraction algorithms accuracy by **75%**.
- Sped up data analysis and visualization by **3.5x** by building an **AWS Lambda** based ETL worker.

Evidence for Policy Design - Harvard Kennedy School

New Delhi, India

Software Development Intern

May 2019 - Aug 2019

- Built custom software packages using **Python** for data ETL between **SQL** servers and web application.
- Increased processing efficiency for social networks data by **80%** by using *fuzzy string-matching* algorithms.

Dept. of Computer Science, Duke Univ.

Aug 2019 - Dec 2021

Teaching Assistant:

Intro CS, Interdisciplinary Computing, Programming Interview Skills, Databases

PROJECTS & PUBLICATIONS

Genesis.AI: Created a Text-2-Video GIF generator using opensource generative AI models (self-hosted). Made using Python, Modal, Svelte, Cloudflare, & Supabase. **Link** [↗](#).

Dec 2023

Transformers For Recognition In Overhead Imagery: A Reality Check

PDF [↗](#).

Francesco Luzi, Aneesh Gupta, Leslie Collins, Kyle Bradbury, Jordan Malof

WACV 2023

Applied Machine Learning Lab - Undergraduate Researcher

Aug 2019 - Dec 2021

- Tackling semantic segmentation for medical scans and satellite imagery using methods like encoder-decoder networks, vision transformers, and other image processing and machine learning techniques.
- Built a system to generate synthetic textures and model artificial cities realistically, to improve and produce richer training data to enhance generalisability of remote sensing models. **Link** [↗](#).

SKILLS

Programming Languages

Python, C++, Java, JavaScript, Scheme, R, SQL

Frameworks & Tools

Mongo, PyTorch, Django, React, Git, CI/CD, \LaTeX , Pandas, NumPy

Interests

History, Tech and Policy Development, Philosophy, Computer Vision, Graphics