Aneesh Gupta

Mountain View, CA
984.209.8333 ⋄ aneeshgupta8@gmail.com ⋄ aneeshgupta.me/ ⋄ aneeshgupta42

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 Perception Systems for autonomous vehicles for goods delivery.
- Working on onboard software modules, evaluation and measurement frameworks, and data pipelines.

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

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.**
- Investigated deep learning and computer vision techniques to map electricity distribution and access.

Transformers For Recognition In Overhead Imagery: A Reality Check **PDF.**
Francesco Luzi, **Aneesh Gupta***, Leslie Collins, Kyle Bradbury, Jordan Malof* *WACV 2023*

Project Minerva: Creating a search query engine to access online learning resources like top courses, videos, books, blogs, & code-bases in a single place. Made using React, Flask, Selenium, & requests. **Link.**

SKILLS

Programming Languages	C++, Python, 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