Aneesh Gupta

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EDUCATION

DUKE UNIVERSITY
BS in Computer Science
Minor in Mathematics
May 2022 | Durham, NC
Cum. GPA: 3.98 / 4.0
Major GPA: 4.0 / 4.0

Dean's List, All semesters

DELHI PUBLIC SCHOOL
Grad. May 2018 | New Delhi, IN
Junior Science Talent Scholar

LINKS

Website:// **aneeshgupta.me**
Facebook:// **xneesh**
Github:// **aneeshgupta42**
LinkedIn:// **aneeshgupta42**
Twitter:// **@aneesh__gupta**

COURSEWORK

UNDERGRADUATE
Adv. Software Design,
Computer Architecture,
Deep Learning and Energy Data,
Probability, Linear Algebra,
Discrete Maths, Writing,
Data Structures and Algos,
Multivariable Calculus,
Economic Principles,
Prisoner's Dilemma

SKILLS

PROGRAMMING
Languages:
Python • Java • JavaScript
C++ • Matlab • R • LaTeX
Familiar:
C • Scheme • CSS • Shell
Frameworks and Tools:
React • Android • NodeJS
Git • HTML • Flask • MySQL

INTERESTS

Philosophy, History
Software + Data Engineering
Computer Recognition
Data Modelling & Analytics
Tech for Social Development
Geographic Remote Sensing

EXPERIENCE

ANB SYSTEMS, INC | Software Engineering Intern
May 2020 - July 2020 | Houston, TX

- Enhanced document recognition by improving Python image extraction algorithms by **75%** for ANB System's energy efficiency clients.
- Sped up data wrangling and analysis by **3.5x** by building an **AWS** Lambda based worker to ingest, transform and process large data payloads.
- Designed an end-to-end Data Lake architecture with **Flask** endpoints to retrain machine learning models with new data & improve over time.
- Created back-end algorithms for an Android app that takes a picture and extracts specific information using OCR and search patterns.

EVIDENCE FOR POLICY DESIGN | Software Development Intern
May 2019 – Aug 2019 | Harvard Kennedy School | New Delhi, IN

- Built custom software packages using **Python** for data E.T.L pipelines between **SQL** servers and a mobile and web application. Deployed on AWS, as part of a *Randomized Control Trial*. In production.
- Developed a software package and protocol from scratch to extract, clean, and map social networks data using fuzzy string-matching. Outperformed existing system efficiency by **80 %**.
- Sped up system testing & data retrieval by **5x** using **Selenium** drivers and headless browsers.
- Created a dashboard in **R** to aid economists in quantitatively analyzing the impact of a policy intervention to measure women's smartphone access in rural India.

DUKE UNIV. CS DEPARTMENT | Teaching Assistant
Aug 2019 – Present | Durham, NC

- Leading weekly lab sections, consulting hours, and assisting in grading examinations for Duke's *Introduction to Computer Science* and *Interdisciplinary Computing* courses.

RESEARCH

ENERGY DATA ANALYTICS LAB | Undergraduate Research
Aug 2019 – May 2020 | Durham, NC

- Built a system to generate synthetic textures to model artificial cities realistically. **Link.**
- Investigated deep learning and domain adaption techniques to map electricity distribution and access using satellite imagery.
- Used dimensionality reduction tools such as tSNE and PCA to improve performance across different geographies.

PROJECTS

- **Minerva:** Built a search engine for online-learning resources that provides users with top courses, videos, books, blogs, and code-bases in a single place. Built using React, Flask, and Web Scraping in Python.
- **HouseOfCards:** Created a graphical suite of card games such as Solitaire, Cards Against Humanity, Truth or Dare, and Concentration. Used immutable APIs, Inheritance, Test-Drive-Dev, & MVC Architecture to implement project. Built using JavaFX and Stylesheets.