Akshath Chaudhary

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Education

University of Waterloo September 2019 – May 2024
4A, Bachelor of Computer Science; ***CGPA: 3.90/4.00*** *Waterloo, ON*

- **Awards**: *Dean's Honours List, Concept Entrepreneurship Funding Recipient, Intramural Soccer finalist*
- **Relevant Coursework**: *Data Structures and Data Management, Machine Learning, Computer Security, Object-Oriented Software Development, Algorithm Design and Data Abstraction, Operating Systems*

Relevant Experience

Coinbase September 2022 – December 2022
Software Engineering Intern *Toronto, ON*

- Joining the Machine Learning & Platform team to build machine intelligence into Coinbase products.

Lumafield January 2022 – April 2022
Software Engineering Intern *San Francisco, CA*

- Developed a self-learning **recommendation engine** with collaborative filtering for initial scan settings per customer segment using TensorFlow, Pandas, and Matplotlib.
- Developed a **language processing** algorithm to detect and match similar scans for easy analysis with a k-fold cross validated accuracy of 85% using SciPy and NumPy.
- Constructed an ETL **pipeline** to concurrently update scan specific data in real-time which reduced wait time by 35% and decreased storage consumption by 60% using Dask, Kubernetes, and SQLAlchemy.

Huawei May 2021 – December 2021
Software Engineering Intern *Toronto, ON*

- **Improved runtime** of FPGA Static Timing Analysis (STA) by over 88% via a conditional incremental algorithm using Boost that identifies and updates modified elements in the netlist.
- Spearheaded development of a **testing framework** that increased code coverage by 120% using CMake.
- Implemented a **path delay validator** that estimates all point to point delays using node aggregation.

Unite May 2020 – August 2020
Lead Full Stack Developer Intern *Waterloo, ON*

- **Promoted** to Lead Full Stack Developer for excellent performance. Led a team that was in charge of developing new and existing features for Unite's web applications.
- **Saved $20,000** for the company by refactoring the existing codebase to exclude Google's restricted scopes. Successfully led the Google security assessment with a turnover of just 2 days.
- Decreased product delivery time from **2 days to 10 seconds** by developing a custom Node.js module that automates deployment via direct addition of the product to the user's account.

Projects

Taco | *NLP, React.js, Express,js, Firestore, Python* June 2021

- Implemented a unique quantitative speech analysis algorithm using GCP NLP, Express.js, and Firestore that returns a score based on the user's confidence, clarity, and syntax. Built the frontend using React.
- Declared as the **overall winner** of EngHacks 2021 and secured the first prize among **300+** hackers.

Technical Skills

Languages: Python, C++, SQL, C, Java, Go, Ruby, JavaScript, HTML/CSS, R

Libraries: TensorFlow, PyTorch, Pandas, NumPy, SciPy, MongoDB, Scikit, Boost C++, Tatum

Tools: Git, Docker, Kubernetes, VIM, GDB, GCOV/LCOV, TravisCI, Google Cloud Platform

Frameworks: React, Node.js, AWS, NLP, Postgres, OpenCV, Django, Angular.js, Vue.js