Denzil Ekow Bilson

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Education

University of Colorado at Boulder **GPA: 3.5**

BSc. Computer Science *Aug. 2019 – May. 2023*

MS. Computer Science *Aug. 2023 – May. 2024*

Technical Skills

Languages: C/C++, Python, JavaScript, SQL (Postgres)
Developer Tools: Git, Mercurial, Google Cloud Platform, JupyterLab, Heroku, LaTeX
Relevant Coursework: Machine Learning, Neural Networks and Deep Learning, Natural Language Processing, Data Mining, Intro to AI, Algorithms, Statistics with Computer Applications, Numerical Computation, Data Structures, Database Systems, Computer Systems, Principles of Programming Languages, Intro to Data Science, Software Development and Tools, Cybersecurity, Logic, Intro to Robotics

Experience

NLP Graduate Researcher Aug 2023 – Present

BLAST *Boulder, CO*

- Graduate member of the Boulder Language and Social Technologies (BLAST) research group at CU Boulder
- My work focuses on constructing a flexible framework for characterizing collaborations in conversations via high-level discourse cues by taking advantage of LLMs for few-shot learning

SWE Intern May 2023 – Aug 2023

Lyft *San Francisco, California (Remote)*

- Assigned to the Privacy and Security team at Lyft, primarily working on a crucial backend conversion project
- Transformed a complex remote backend graph comprised of vital Lyft ride entities (including cars, phones, accounts) into a proprietary Hive Table, enhancing the security and accessibility of key data assets
- Utilized Golang in the intricate build process, ensuring robust and efficient performance
- Conducted rigorous testing using Golang, ensuring flawless function and high reliability
- Authored an in-depth technical design document, presenting detailed specifications of the build

SWE Intern May 2022 – Aug 2022

Google *New York, New York*

- Initialized backend pipeline between Google Data Studio and Google Cloud Engine's Big Query to facilitate native access and use of Big Query models within Data Studio
- Authored technical design document for aforementioned project detailing end-to-end build
- Mitigated through several access issues and unforeseen setbacks, created internal documentation detailing said issues and their solutions
- Built using Java and Angular, Mercurial for version control, and Java flags for experimentation

SWE Intern Jan 2022 – Apr 2022

Lyft *New York, New York(Remote)*

- Built in app component fully end to end with proprietary Backend For Frontend (BFF) architecture, including documentation composition, programming of the system, design and implementation of test plan, experimentation and rollout (4k+ lines of code)
- Collaborated cross functionally with partner teams to onboard them on content relevance, including working with product design teams to reduce user friction
- Rolled out system iteratively to ensure non-degradation of existing systems. Launched Alpha/Beta to 8-15% of all Lyft app users
- Facilitated the launch of Lyft/Chase collaboration content (used my component build to display in app content)

STEP Intern May 2021 – Aug 2021

Google *Mountain View, California (Remote)*

- Contributed to the Reserve with Google Partner Portal (Partner Facing Web UI), which supports integrations for 180+ partner companies and 6 million+ businesses on Google Search/Maps
- Developed proficiency in Mercurial, gRPC, protocol buffers, Internal C++ RPC server framework and other Google internal tools
- Co-authored end-to-end technical design document with a fellow intern based on minimal product specification
- Led implementation of backend RPC services and Spanner SQL database interaction
- Took a look at existing Flume pipeline (mapreduce-like batch job) and fixed bugs

Software Engineer March 2021 - Jan 2022

ModScholar *Boulder, Colorado*

- Software Engineer for Boulder Startup ModScholar, Full Stack SaaS built with React, Mongoose(MongoDB), Express, and Node, 200k+ lines of code
- Manage logic changes and implementation of new objects for front-end through the entire stack

STEP Intern May 2020 – Aug 2020

Google *Seattle, Washington (Remote)*

- Developed a full stack web application that functioned as a publicly available social network (neighbor to neighbor) to enable residents to solve local issues
- Worked in a team of three to collaboratively implement server, backend, and front-end using Google App Engine. Java, Maven, HTML, Git, as well as co-authored design doc
- Developed unit tests with JUnit and end-to-end system tests with Selenium

National Society of Black Engineers (NSBE) Webmaster Aug 2020 - May 2022

University of Colorado at Boulder *NSBE Region 6*

Notable Projects

Stanford TreeHacks Hackathon Feb 2021

- Built automation system for wireless door unlock using Raspberry Pi

Aria | *C++* Aug 2019 – Jan 2020

- CLI Based Adventure Game. The entire game runs in the command line. Takes user input and output both scenario updates and fully functional map drawn with text, 2k+ lines of code

Game Development | *HTML, CSS, and JavaScript* June 2020 – Present

- Pong, Block Breaker, Snake, Google Dino Game, Conway's Game of Life
- Built fully functional clones of these games using HTML/CSS and JavaScript.

Personal Portfolio Site | *Google Maps API, Java (w/ Java Servelets), Maven, Git* May 2020 – June 2020

- Online Front-end Interface for Projects and Resume built with React