### Christian Aaron Gould

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**EDUCATION: Southern Methodist University** Dallas, TX Bobby B. Lyle School of Engineering Grad Date: May 2023

Bachelor of Science in Computer Science GPA: 3.85

**RELEVANT** Data Structures, Discrete Math, Fundamentals of Algorithms, Assembly Language, Database Systems,

**COURSES:** Calculus I & II, Linear Algebra, Intro to Engineering Design, GUI, NLP, Applied ML, Machine Organization

**TOOLS:** C++, Java, JUnit, Bash Shell, Python, Shell Scripting, MySQL, XML, HTML, CSS, JavaScript, REACT, Git, Pandas, Mockito, Spring Boot, NumPy, Google Drive API, GitHub Actions, Angular, Typescript, Kafka

**SKILLS:** AWS, Linux, vim, vi, CATCH, TDD, SCRUM, Agile, Feature Testing

**ENGINEERING PROJECTS:**

**Search Engine** Fall 2020

* Wrote a search engine to search for the most relevant terms within a corpus of scientific articles
* Implemented a custom, templated HashMap and AVL-Tree data structure for an inverted file index
* Used term frequency analysis to return more relevant results of a search to a user for 100,000 articles
* Integrated the use of binary operators such as OR, NOT, AND in the terminal UI for the user to search with

**ENGR 1357 Vending Machine** Fall 2021

* Implemented a control system for a maker lab hardware vending machine in a classroom setting
* Produced a platform that used a Raspberry Pi for UI and backend, while using Arduino for motor control
* Designed team accounting software for hardware distribution to over 120 students via Google Drive API

**Senior Design Project,** *Unbent Data Visualization*Spring 2023

* Engaged with external company Unbent to deliver a software solution
* Completed the project with a full lifecycle delivery using requirements engineering, design, and architecture
* Made extensive use of React for the frontend, AWS for deployment, and Node for backend
* Completed a data visualization full stack website that allows companies to view different information about subconscious bias that candidates may have before hiring

**EXPERIENCE:**

##### McKesson, Autonomy and Mobility Software Engineering Intern, Irving, TX Summer 2021

* Participated in daily standups of a SCRUM AGILE environment in a team of 7 Software Engineers
* Added source code to the main codebase of ESIT Core, McKesson’s multi-purpose data streamlining service
* Implemented a logging diagnostic utility using Context Dependency Injection
* Formed various JUnit tests to meet specific acceptance criteria

##### Capital One, Software Engineering Intern, Plano, TX Summer 2022

* Participated in daily standups of a SCRUM AGILE environment in a team of 5 Interns
* Added source code to DocViewer, Capital One’s management platform for auto loan funding
* Deployed a microservice utilizing an OCR API to enable word searching in scanned documents
* Wrote regex and logic to mask personal information from stored data and data traffic
* Completed end-to-end testing with feature testing deployed to Sandbox
* Edited production-level code in Angular to add new components necessary for the searching process
* Reviewed and processed over 60 pull requests for various features and changes

**Lyle School of Engineering,** *Teaching Assistant*, Dallas, TX Aug 2020 – Current

- *Introduction to Engineering Design*

* Mentored multiple teams each semester in leadership and interpersonal communication development
* Monitored the teams’ progress on meeting deadlines, and assisted with technical and leadership issues
* Led student team retrospectives after completed sprints
* Debugged various Electrical circuits and Arduino C code on a robot that students build from scratch

- *Data Structures / Principles of Computer Science*

* Taught students in lab periods about various topics in software, including best practices and concepts
* Assisted students in debugging any errors they run into while completing projects
* Assisted professors in grading and evaluating students, teams, and their projects