### 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: 3.7

**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, Dataframes, PySimpleGUI, NumPy, Google Drive API, GitHub Actions

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

**ENGINEERING PROJECTS:**

**Search Engine** Fall 2020

* Wrote a search engine to search for most relevant terms within a corpus of scientific articles
* Implemented a custom, templated HashMap and AVL-Tree data structure to serve as back end for inverted file index of 100,000 scientific articles
* Used term frequency analysis to return more relevant results of a search to a user
* Integrated the use of binary operators such as OR and NOT for the user to search with
* Achieved searching of the corpus by Author or by Word

**ENGR 1357 Vending Machine** Fall 2021

* Implemented a control system for a maker lab hardware vending machine
* Targeted platform that used Raspberry Pi for UI/Backend and Arduino for motor control
* Designed team accounting software to manage hardware use and distribution to over 120 students using Google Sheets accessed via Google Drive API.

**Restaurant Management Website**

* Word in a group to Implement a website for the management of stock and resupply in a restaurant
* Created in JavaScript and REACT for the frontend, and MySQL for the backend database
* Deployed the frontend to an AWS EC2 instance, and the backend to an AWS RDS
* Launched CI/CD with GitHub Actions

**EXPERIENCE:**

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

* Worked in a team of 7 Software Engineers on ESIT Core data management system.
* Participated in daily standups of a SCRUM AGILE environment, with 2-week sprints
* 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 in order to meet the acceptance criteria
* Adapted an easily expandable, object-oriented approach to injecting loggers into various areas of a code base, to allow for a smoother and future-proof approach to debugging java code

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

- *Introduction to Engineering Design*

* Mentored one team each semester in leadership and interpersonal communication development
* Monitored a team’s 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 which students build from scratch

- Data Structures / Principles of Computer Science

* Teach students in lab periods about various coding practices
* Assist students in debugging a multitude of different memory errors in C++
* Assist professors in grading and evaluating students, teams, and their projects