**Dheemanth Sai Majji**

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**Education**

**Vanderbilt University | *School of Engineering*** **Nashville, TN | Expected Graduation: Spring 2026**

* **Majors:** Applied Mathematics, Computer Science
* **Minor**: Applied Data Science
* **Relevant** **Coursework**: Intermediate Software Design, Data Structures and Algorithms, Program Design and Data Structures, Digital Systems, Discrete Structures

**Skills & Certifications**

* **Languages**: C++, C, Java, Python, HTML / CSS, SQL
* **Technologies**: Pandas, Visual Studio Code, IntelliJ, Git, NumPy, Spark, Python Sci-Kit, Seaborn, Matplotlib, Tableau, Webscraping, Microsoft Excel, Google Sheets, JUnit Testing, IBM Cognos, ClickUp
* **Certifications:** Udemy Python for Data Science and Machine Learning Certificate, IBM Data Analyst Professional Certificate

**Work Experience**

**Mobile Health for Global Health Vanderbilt University Lab | *Software* *Engineer Intern* Nashville, TN | Sept 2023– Present**

* Utilized Pandas dataframe within Python, pulling RedCap data using an API to analyze over 17,500 points of malaria RDT (rapid diagnostic testing) paradata from a 5+ year long Kenyan study (scheduled publishing end of 2023)
* Employed Pandas libraries to clean and preprocess extensive amounts of datasets of user test information, successfully eliminating 17.27% of outliers and false positives / negatives, improving efficiency by .46%.
* Developed UI / UX and backend functionality for drag and drop user RDT web application.

**Saint Luke’s Hospital | *Volunteer* Boise, ID | Jan 2019 – Feb 2021**

* Facilitated the visitation n of an average of 20 patients and family members per day under maternal care, utilizing the hospital visitation interface.
* Coordinated transportation arrangements for visitors during the surgical waiting period, utilizing the hospital visitation interface and surgical waiting room checklist.

**Project Experience**

**Guitar Hero Builder | *Java* Oct 2023**

* Implemented a linked list queue ADT to model the guitar string’s ring buffer. Used Karplus-Strong algorithm to simulate the plucking and vibration of the guitar string.
* Read a file of doubles containing the desired guitar notes and frequencies. Generating a .dat file containing the sampled guitar string audio data.

**SoundCloud Web Scraper | *Flask.JS, Python, HTML, CSS* Jun 2023**

* Designed a web application which utilizes a Beautiful Soup web scraper to extract streaming data from SoundCloud music library.
* Converts scraped data into a monetary value using a currency API, providing insights into potential revenue generation.

**Flight Data Analysis | *Java* May 2023**

* Created a program that takes airport names or abbreviations as input and reads CSV files with appropriate data.
* Returns the annual statistics on flights which were cancelled, delayed, diverted, and on time, as well as % distributions.

**Leadership & Community Involvement**

**Community Outreach Idaho | *Project Manager*** **Boise, ID |** **Aug 2020 – May 2022**

* Led a five members team to organize a clothing drive, resulting in over 400lbs of used clothing donated to clothing centers specifically targeting homeless youth.
* Organized service projects with local K-6 schools to create the first youth lead special needs assistance program.