

Dheemanth Sai Majji

dheemanth.s.majji@vanderbilt.edu | (208) 576-6301
<https://www.linkedin.com/in/dheemanth-s-majji/> | <https://dmajji.github.io/>

Education

Vanderbilt University | *School of Engineering*

Nashville, TN | Expected Graduation: Spring 2026

- ❖ **Majors:** Computer Science, Applied Mathematics **Minor:** Data Science
- ❖ **Relevant Coursework:** Intermediate Software Design, Data Structures and Algorithms, Program Design and Data Structures, Digital Systems, Discrete Structures, Multivariable Calculus, Calculus 1, Calculus 2

Skills & Certifications

- ❖ **Languages:** C++, C, Java, Python, HTML / CSS, SQL
- ❖ **Technologies:** Flask.JS, Pandas, Matplotlib, IntelliJ, Git, NumPy, Spark, Python Sci-Kit, Seaborn, 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 RedCap API to investigate relationships between New York and Chicago testing sites to compare false positive rates over by using MatPlotLib graphing, summarizing a 5.6% higher false positive rate at the New York site.
- ❖ Diagnosed and maintained over 50,000 data points of user test information by utilizing Panda libraries to filter out 17.27% of outliers and false positives/negatives within dataset, improving efficiency by .46%
- ❖ Analyzed RDT (rapid diagnostic testing) paradata from a 5+ year long Kenyan study to calculate % of users logging outside of testing window using Pandas dataframe within Python, concluding 17.78% of users logged in outside of testing window.
- ❖ Summarized these intricate relationships to produce a comprehensive paper scheduled for publishing in Spring 2024, outlining key findings and insights derived from the study.

Saint Luke's Hospital | *Desk Technician*

Boise, ID | Jan 2019 – Feb 2021

- ❖ Streamlined patient and family visitation, managing an average of 20 daily visits by optimizing hospital visitation interface.
- ❖ Enhanced efficiency by coordinating transportation logistics during surgical waiting periods using hospital visitation interface alongside surgical waiting room checklist.

Project Experience

Guitar Hero Builder | C++

Oct 2023

- ❖ Implemented a linked list queue ADT to model the guitar string's ring buffer which used Karplus-Strong algorithm to simulate the plucking and vibration of the guitar string.
- ❖ Interpreted a file of doubles containing the desired guitar notes and frequencies. Generated a comprehensive .dat file containing the sampled guitar string audio data which could be played out loud.

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

Jun 2023

- ❖ Developed a web application which utilizes a BeautifulSoup web scraper to extract streaming data from SoundCloud music library.
- ❖ Computed scraped streaming data into a monetary value using a currency API, predicting potential revenue generation for artists.

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.

Workshop Experience

Workshops

- ❖ Getting Started with ArcGIS Pro , PolicyMap Workshop, Connecting the Dots: An Introduction to Network Analysis, Geocoding , Basic Spatial Statistics , Getting started with QGIS, Exploring ArcGIS Online (web mapping)