

DHEEMANTH SAI MAJJI

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Education

Vanderbilt University School of Engineering

Expected Graduation: May 2026

Major: Bachelor of Science in Computer Science, Applied Mathematics

Nashville, TN

Relevant Coursework: Data Structures and Algorithms, Intermediate Software Design, Operating Systems

Experience

Palantir

Dec 2024 - Present

Software Developer Winter Fellow — Palantir Foundry, AIP, Python

Remote

- Built an AI-driven supply chain monitoring system in **Palantir Foundry**, processing over **10,000 daily records** from multimodal logistics data sources.
- Designed ingestion pipelines integrating **AWS S3**, REST APIs (MarineTraffic, OpenWeatherMap), and CSV datasets, automating data transformations with a **30% reduction in processing time**.
- Developed dashboards in **Foundry Workshop** with geospatial maps and filters, tracking real-time shipment delays and reducing decision time by **25%**.

Leidos

May 2024 – Aug 2024

Software Engineer Intern — JavaScript, Python, Apache Server, Red Hat API, HTML / CSS

Remote

- Transformed a static **250+ record HTML file** into a dynamic **JavaScript** interface, improving usability and enabling faster data access for internal teams.
- Integrated **Apache HTTP** server with **Red Hat API** using **JSON** to optimize and centralize data operations, enhancing accessibility for **7,500+ users** across the company.
- Accelerated vendor management by **40%** with advanced **JavaScript** filtering, search, and date time functions.
- Acquired INTERIM SECURITY LEVEL CLEARANCE

M.H.G.H Vanderbilt Lab

Sept 2023 – Present

Software Engineering Intern — Python, Pandas, Matplotlib, RedCap API, Seaborn

Nashville, TN

- Analyzed testing data from New York and Chicago sites using **Python**, **RedCap API**, and **Matplotlib**, uncovering a **5.6% higher false positive rate** at the New York site.
- Utilized **Pandas** library to process and clean over **50,000 data points** of user test information, filtering out **17.27% of outliers** and false positives/negatives, and improving data processing **efficiency by 0.46%**.
- Co-authored research manuscript** with support from Northwestern, Columbia Nursing, Feinberg Medicine, and Chicago Pediatrics.

Medical-image Analysis and Statistical Interpretation (MASI) Lab

Feb 2024 – May 2024

Science Communication Analyst

Nashville, TN

- Translated scientific research into accessible narratives and audited PubMed, ensuring 100% accuracy by adding 10+ missing entries monthly.

Projects

Deep Learning Soccer Analysis System | Python, OpenCV, YOLOv8, Kaggle

Jun 2024 - Present

- Developed and implemented an AI-driven soccer analysis system utilizing **YOLOv8** for real-time detection of players, referees, and soccer balls, achieving a **detection accuracy of 95%** and **processing speed of 30FPS**.
- Utilized Kaggle to manage and train **CNN models**, incorporating **KMeans clustering** and OpenCV for team identification and player tracking.
- Employed optical flow and perspective transformation to calculate player movement metrics, achieving **less than 5% testing loss**.

Blockchain Analytics and Persistence Engine | C++, CMake, GoogleTesting

Feb 2024 - Mar 2024

- Enhanced a blockchain database in C++ with data persistence using **Visitor**, **Factory** and **Build** patterns.
- Facilitated transactions and user activity using **Debug**, **Ledger**, and **Whale** patterns for improved database analytics.
- Enabled multi-format data storage, including custom **JSON format**, for versatile and compatible data management.

Technical Skills

Languages: Python, C++, C, Java, JavaScript, noSQL, SQL, Assembly

Developer Tools: REST API, AWS, Git, Agile / Scrum methodology, API and Server Integration, Linux Shell, Unit Testing, Redux, Backend Development, Frontend Development

Technologies/Frameworks: Node.JS, React, Python Sci-Kit, Flask, NodeJS, Pandas, NumPy, Matplotlib, Seaborn, Slack, Bash, UNIX