

SWETHA PRAKASH

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EDUCATION

Masters in Computer Science

Expected Dec 2025

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science

CGPA: 3.78/4.00

B. Tech in Information Technology

Aug 2020 – May 2024

SASTRA Deemed University

CGPA: 8.70/10.00

TECHNICAL SKILLS

Language

Java, React, Python, MongoDB, Express.js, C++, C, JavaScript, HTML, CSS

Software & OS

Eclipse, IntelliJ, Visual Studio Code, Git, Linux, MySQL, Jupyter Notebook, Anaconda

PROFESSIONAL EXPERIENCE

Global Health Impact (GHI), Full-Stack Intern | Binghamton, NY

Jan 2025 – Aug 2025

- Provide research and technical support to GHI, a World Health Organization (WHO) global initiative to evaluate access to essential medicines via an index measuring pharmaceutical products' impact on global health
- Build interactive visualizations and responsive UI components using React, HTML, CSS, and JavaScript, to make global medicine access data clearer and easier to use for health researchers and decision-maker
- Collaborate with a cross-functional team of 12 developers and 10 researchers to design and implement visual tools such as bar charts, pie charts, and geographic maps that support GHI's global health mission

Binghamton University, Teaching Assistant (Python Programming Course) | Binghamton, NY

Aug 2024 – Aug 2025

- Provide instructional and academic support for a Python programming course with 300+ students, reinforcing foundational programming concepts including loops, functions, and data visualization with Matplotlib and Pandas
- Coordinate with the lead instructor to design course content and study guides, provide one-on-one coding support, and deliver targeted feedback on logic, and debugging practices to improve student performance
- Explain Python concepts using real-life examples, making technical topics easier to understand and strengthening communication with diverse learners

Optum, Java Backend Developer Intern | Hyderabad, India

Jun 2023 - Aug 2023

- Contributed to a U.S.-based Value-Based Reimbursement (VBR) system aimed at improving healthcare outcomes by aligning provider payments with patient results
- Developed backend features using Java Spring Boot and implemented Aspect-Oriented Programming (AOP) to improve logging, reduce errors, and help developers monitor system activity
- Liaised with U.S.-based engineering teams to align backend architecture and ensure reliable deployment of services within the Value-Based Reimbursement platform

PROJECT EXPERIENCE

Product Store Application, Full-Stack (Independent Project)

Mar 2025

- Implemented a full-stack, responsive web application using the MERN stack (MongoDB, Express.js, React, Node.js) to enable dynamic product management with real-time create, update, and delete functionality
- Implemented a RESTful API with over 10 endpoints to handle efficient CRUD operations, enabling real-time synchronization of product data between the React frontend and Node.js backend for a database of 100+ items
- Deploy the application on a cloud platform, ensuring availability, optimal performance, and public accessibility

Depression Detection using Sentiment Analysis, Big Data Analytics

Jan 2024 - Mar 2024

- Tackle the growing concern of mental health by developing a machine learning framework to identify individuals at risk of depression based on Facebook activity and social interaction patterns
- Build a machine learning pipeline in Python using Jupyter Notebook, implementing and comparing seven algorithms, including Random Forest, which achieved 95% accuracy on sentiment-labeled Facebook

ADDITIONAL LANGUAGES

Japanese - Cleared level N5 and N4, **English** - Full working proficiency, **Tamil** - Native Lingual