SAI CHANDANA PRIYA AVVARU

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Summary

Experienced Software Engineer with expertise in full-stack development, testing, and project management, currently pursuing an MS in Computer Science at Penn State, with a proven track record of enhancing software efficiency and mentoring peers.

Education

Pennsylvania State University, State College **Anticipated May 2025**
Master of Science in Computer Science and Engineering *CGPA: 3.7/4*

P V P Siddhartha Institute of Technology **April 2020**
Bachelor of Technology in Computer Science and Engineering *CGPA: 9.48/10*

Technical Skills

Programming Languages/Frameworks: C, Java, JavaScript, Typescript, Python, Figma, React.js, Next.js, Node.js, Angular.js, Kotlin
Web Technologies/Tools: VSCode, Postman, Android Studio, Docker, REST API, Material UI, Redux, HTML, CSS, Redux, GraphQL
Databases/Cloud/OS: MySQL, Cosmos DB, MongoDB, Azure, macOS, Linux
Testing, Version Control, DevOps: Jest, Cucumber, Cypress, Accelq, Git, GitHub, Docker, Jenkins for CI/CD, Agile-Rally
Certifications: Azure(AZ-900, DP-900, AI-900), Optum(FSE,SDET), Meta Front-End Developer Professional Certificates

Relevant Coursework

- Data Structures
- Software Methodology
- Algorithms Analysis
- Database Management
- Artificial Intelligence
- Computer Networks
- Systems Programming
- Computer Architecture
- Distributed Systems
- Vision and Language
- Natural Language Processing

Certifications

- Azure AZ-900, DP-900, AI-900 Certification from Microsoft. Agile Project Management, Meta Front-End Development from coursera.
- Full Stack Engineer, Software Development Engineer in Test (SDET) Certifications from Optum.
- Obtained Elite Certificates from NPTEL in “Soft Skills and communication” and “Database Management System”.

Experience

Intel Corporation **April 2025 – present**
Front-End Tools Intern *Austin, Texas, USA*

Developing an automated emulation dashboard using GitHub APIs to dynamically display repository information in a clean and customizable format.

Optum - United Health Group **August 2020 – August 2023**
Software Engineer *Hyderabad, India*

- Engineered interactive components in Storybook with React and TypeScript; integrated functionalities into Clockwork portal, resolving key technical risks through stakeholder collaboration and increasing portal efficiency by 35
- Streamlined code delivery using distributed version control systems and robust CI/CD pipelines, achieving a 30% reduction in bug-related downtime and accelerating release cycles by 50% across testing and production environments.
- Crafted detailed Miro diagrams encompassing state, flow, and sequence diagrams; ensured adherence to business rules, streamlining project workflows and boosting team efficiency by 30% and reducing errors by 20%
- Utilized Cypress, to build testing scripts for the components and Accelq to test the site’s business flows.
- Executed an agile strategy to meet sprint deliverables while assisting the team in maintaining TTV and TTB.
- Mentored juniors and participated in peer code reviews to ensure adherence to coding standards and best practices.

WOIR Software India Private Limited **8 Weeks - 2018**
Intern *Hyderabad, India*

- Collaborated on building the Dress-Color Suggestion Interface based on image processing using OpenCV-Python.
- Developed ajax based frontend for WOCLO which is cloud-based Edu-platform for machine learning and big data analytics using cloud computing (digital ocean API using python).

INTERNSHALA **8 Weeks - 2018**

Trainee *Online Training Platform*

- Leveraging Android Studio, which allowed me to go deeply into various Android domains using Kotlin, I was able to develop a music application named ECHO within 4 weeks.

Mentorship

Teaching Assistantship **August 2023 – May 2025**

CMPSC 101,131 - Introduction to Programming, Programming and Computation *Penn State*

I have assisted Professors Rodger Christman and Jaye Pope with CMPSC 101: Introduction to Programming and CMPSC 131: Programming and Computation at Penn State. My responsibilities included proctoring exams, guiding students during recitation sessions, and supporting course logistics. I also helped graders understand grading rubrics, contributed to the design of mini-projects, conducted office hours, and provided individualized support for students working on programming assignments.

Projects

Sci-Cap | *Full Stack Development, LLM's* **Jan 2025 – *Present***

Summary Develop and deploy a machine learning-based web application using React for the Front-end, FastAPI, and GROBID for backend processing, running in parallel on Azure Kubernetes. Utilize Azure Functions for serverless deployment and integrate Selenium for figure extraction and caption generation from academic PDFs, with data stored in Azure Blob Storage.

Portfolio | *Next.js, React.js, Tailwind* **May 2024**

Summary Built a personal portfolio website using React, Next.js, and Tailwind and deployed it on Vercel to showcase my academic and project work

All-to-key Attention for Arbitrary Style Transfer | *Torch* **December 2023**

Summary On top of NEURAL STYLE TRANSFER, this is an optimized model that helps to increase the accuracy of applying style to an image

Neural Style Transfer | *Tensorflow* **February 2020**

Summary Two input images—one stylized and the other normal—are combined with a convolution neural network to extract attributes from the styled image and apply them to the normal image. **Applications** Real-world applications like gaming and virtual reality.

Detection of Quality of Leaf | *NumPy, Keras and Pandas* **October 2019**

Summary We trained a deep convolutional neural network to recognize 14 crop species and 26 illnesses using a public dataset of damaged and healthy plant leaves gathered under controlled settings. On a held-out test set, the trained model achieves an accuracy of 99.35 proving the viability of this method.

Applications Useful for the farmers as it can help predict malady in a leaf quickly.

Leadership Experience

- Chairperson for ACM student chapter - PVPSIT.
- Board member for the student chapter, Computer Society of India - PVPSIT
- Event Co-Ordinator for IGSA student chapter - Penn State

Achievements

- Secured all India rank 3641 in the Graduate Aptitude Test in Engineering (GATE).
- Sapphire and amethyst recognitions from Optum for my contribution.
- MAKE IT HAPPEN award for being a part of an end-to-end team and our ability to deliver on time with clean code.