

Tharunya Pathipati

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Summary

Pushing the boundaries of Security, Cloud Computing, and DevOps, always looking for better, smarter ways to solve problems, streamline workflows, and build resilient systems that make a real impact at the intersection of technology and innovation.

Education

Colorado State University – Master of Science in Computer Information Systems

Aug 2024 - Present

- CGPA: 3.5/4.0 | Graduation: Dec 2025
- **Courses:** Advanced IT Project Management, Cybersecurity, Information Assurance and Security, IT Communications Infrastructure

Sathyabama Institute of Science and Technology – Bachelor of Science in Computer Science Engineering (Specialization in AI)

- CGPA: 9.27/10 | Top 1% Graduate | Best Outgoing Student Award
- **Courses:** Operating Systems, Database Management Systems, Software Development Methodology, Big Data Analytics for AI

Skills

Programming Languages: Python, Java, JavaScript, C, C++, C#, R, SQL, NoSQL, Shell Scripting, HTML, CSS, Node.js, MongoDB, Flask

Technical Areas: Software Development, Data Management, Machine Learning, Network Security, Cloud Computing, Cybersecurity, DevOps

Tools & Technologies: Docker, Jenkins, MySQL, Snowflake, Azure, Google Cloud, Linux Systems, CI/CD Pipelines, Version Control, JIRA, Tableau, Power Platforms, Power BI, SAP, Celonis

Others: Technical Documentation, UI/UX, Figma, Adobe XD, Public Speaking, Event Organization, Microsoft Office Suite, Content Writing

Experience

Colorado State University - College of Engineering

Jan 2025 - Present

Graduate Teaching Assistant, Engineering Manufacturing Education Center (EMEC) Lab

- Engineer an IoT-enabled Access Management System using Python, SQL, and Linux systems, automating lab security protocols and real-time student engagement tracking for 200+ participants per semester.
- Manage cross-college collaborations to optimize procurement and supply chain processes for efficient resource allocation.
- Instruct and mentor 50+ students on manufacturing processes, safety compliance, and industrial automation tools, improving hands-on training.

Nokia

Oct 2023 - Jul 2024

Software Engineering Intern

- Devised and integrated an AI-driven LLM ChatOps model using Python, NLP, and Machine Learning, streamlining product management workflows across 6 teams and reducing manual effort by 40% through automation and intelligent query processing.
- Refined cloud-based MN RAN COSI architecture using AWS, Docker, and Kubernetes, increasing scalability by 17%, improving fault tolerance, and minimizing server downtime by over 4 hours per month through containerized infrastructure and microservices optimization.
- Automated 5G network deployment pipelines, integrating CI/CD workflows with Jenkins and Terraform, resulting in a 35% reduction in operational lag times, accelerating network rollout and improving multi-team collaboration.
- Led DevOps and security-focused cross-functional initiatives, utilizing JIRA, real-time monitoring, and log aggregation tools, optimizing incident detection, and reducing deployment delays by 29%, ensuring continuous delivery and reliability.

Anheuser-Busch InBev

Oct 2022 - Apr 2023

Data Analyst Intern

- Automated procurement workflows using Python, VBA, and SQL, implementing ETL processes to optimize data flow and eliminate manual bottlenecks, resulting in a 28.5% increase in operational efficiency and faster cross-departmental transactions.
- Designed and implemented Celonis KPI dashboards integrated with SAP and Power BI, leveraging data analytics to provide real-time insights on MICS compliance, reducing audit review time by 40 hours/month and improving reporting accuracy.
- Developed and executed automation testing frameworks using Shell Scripting and CI/CD pipelines, validating BOT functionality, identifying and resolving three critical process inefficiencies, ensuring seamless deployment cycles.

Projects

Wiresnitch - Real-Time Network Security Monitor | Tech Stack - Linux Systems, Docker, CI/CD Pipelines, Network Security, Shell Scripting

- A real-time traffic monitoring system for Linux-based environments, featuring an interactive dashboard for packet inspection and anomaly detection, firewall enforcement, and automated log analysis with dockerized CI/CD deployment for scalability.

CyHelp -Content Safety Detection | **Global CyberPeace Challenge 3.0 Winner** | Tech Stack - OpenCV Flask, REST API, NoSQL, ML, NLP

- An AI-powered image recognition system with real-time detection, automated reporting, content filtering, user verification, and modular ML pipelines, ensuring scalability, accuracy, and adaptability.

CipherYou -File Encryption Tool | Tech Stack - Python PyQt5, Cryptography, UI/UX, Version Control

- A cross-platform file encryption tool with AES-256 encryption, PBKDF2 key derivation, password lockout, metadata protection, and secure file deletion, featuring a PyQt5 UI and scalability for future encryption enhancements.

Leadership and Community Involvement

Google Developer Student Club – Lead

- Represented the university in the global GDSC community; organized 2 state-level hackathons, 24 workshops, 6 coding boot camps, and led 3 open-source projects impacting over 1000 students.

TEDxSIST – Organizer and Licensee

- Directed 2 TEDx events with 200+ attendees and 21 curated speakers, leading a 40+ member team to manage logistics, branding, marketing, and speaker coordination, ensuring a seamless and impactful experience.

Google #IamRemarkable Program – Bronze Facilitator

- Facilitated 30+ leadership workshops, equipping women and underrepresented groups with self-advocacy and professional development skills.

Certifications

Cisco IT Essentials | Google UX Professional Certificate | Google Foundation of Cybersecurity | HAAS CNC Certification