

AKSHAYA REDDY PULLA

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EDUCATION

University of Florida (CGPA - 3.9/4.0)

Master of Science, Computer Science

Gainesville, FL

August 2022 – May 2024

- **Relevant Courses:** Distributed Operating System Principles, Machine Learning, Computer Network, Analysis of Algorithms, Advanced Data Structures, Human Computer Interaction, Natural Language Processing.

EXPERIENCE

University of Florida - Graduate Student Assistant

Gainesville, FL

Tech Stack: Node.js, Express.js, MongoDB, Mongoose, JWT, S3, AWS Lambda, CloudFront, Stripe API, MVC

Dec 2022 – May 2023

- Engineered server-side logic using Node.js and Express.js, managing API requests, web server routing, load balancing, and optimizing middleware, achieving a 30% improvement in response time.
- Optimized databases with MongoDB, Mongoose, and Amazon RDS, implementing indexing and query optimization, reducing retrieval time by 20% and enhancing security using AWS IAM.
- Built a responsive UI with React.js, Redux, CSS, and Bootstrap, integrated Stripe API & FCM, reducing load times by 40% and increasing transaction success rates by 30%.
- Deployed on AWS EC2 with S3, Lambda, and CloudFront, achieving 99.9% uptime and 50% latency reduction.
- Designed RESTful APIs, integrated Socket.io for real-time updates and secured authentication with JWT, boosting efficiency by 30% and engagement by 25%.
- Containerized with Docker and set up CI/CD pipelines using Jenkins and GitHub, halving deployment times through automated testing and continuous deployment.

L&T Technology Services - Software Engineer

Bengaluru, India

Tech Stack: Python, Java, AWS, Terraform, React, HTML5, JavaScript, Figma, Django, Flask, Jenkins, Docker, Selenium

May 2018 – Oct 2021

- Streamlined deployment and configuration via Python, AWS CloudFormation, and Terraform, creating reusable templates & scripts, cutting setup times by 40% and ensuring consistent environment setups.
- Crafted ADA-compliant, responsive UIs using React and CSS, integrating state management and responsive design principles, achieved a 20% quicker login, 25% higher user engagement.
- Developed robust backend systems for IoT gateways using Node.js, Django, Flask, & Java, implementing asynchronous processing with AWS Lambda and API Gateway to boost data processing speeds by 40%.
- Automated Legato apps by using shell scripting, boosting productivity by 40% and project speed by 30%. Revamped workflow and code quality by 30% using Git, JIRA, and Confluence.
- Streamlined CI/CD with Jenkins, Docker, and AWS CodePipeline, cutting deployment time by 40%. Improved testing and build efficiency with Selenium, Python, and C++.

BCITS PVT LTD - Software Engineer Intern

Bengaluru, India

Tech Stack: React.js, Express.js, Node.js, Socket.io, OpenCV, MongoDB, PostgreSQL, IoT, Figma.

Jan 2018 – April 2018

- Solely designed and orchestrated a real-time, highly secure full-stack MERN application (with IoT) for cloth factories, eliminating the traditional paperwork 100%.
- Engineered a dynamic web dashboard using Socket.io and React for real-time visualization of key performance indicators, integrating Secure Vision and IoT for efficient data transmission.

PROJECTS

Twitter Engine Clone | C++, JavaScript, MongoDB

- Devised a high-performance Twitter simulator using C++, JavaScript, and MongoDB capable of efficiently managing over 10,000 clients simultaneously, supporting features like registration, tweeting, and real-time tweet querying.

Human Computer Interaction Project – Campus Crib | React, JavaScript, Tailwind CSS, MongoDB

- Built and launched a React web prototype for student housing matches at the University of Florida, employing JavaScript and Tailwind CSS; enhanced user engagement, achieving a 90% user satisfaction rate.

Self-Checkout shopping system | Flask, AWS, React, TensorFlow, Product Design

- Engineered an innovative shopping cart system using a custom-trained AWS Recognition model, halving checkout times and dramatically improving the shopping experience.

An AI-driven NPC with Visual Awareness | Python, OpenCV, ChatGPT Large Language Models (OpenAI), Multi-threading

- Developed a desktop Minesweeper game that integrates with LLM's like ChatGPT to dynamically respond and strategize according to the game state, significantly enhancing user engagement and gameplay innovation.

SKILLS

Programming Languages: Python, C/C++, Java, JavaScript (ES6+), TypeScript, Erlang, Shell Scripting.

Web: React, Redux, Angular, webpack, Bootstrap, Node.js, Express, Django, JWT, Flask, Tailwind CSS, HTML, Selenium, Docker, Jenkins, Kubernetes, Firebase Cloud Messaging. **Databases:** MySQL, Oracle, MongoDB, SQLite.

Cloud: AWS, IAM, RDS, Lambda, CloudFront, S3, EC2, ElastiCache, CloudWatch, SQS, SNS, CloudFormation, CodePipeline.

Tools and Platforms: JIRA, UNIX/Linux, Terraform, Git CLI, GitHub, IOT, Figma, Postman, VS Code, WordPress, Firebase.

Certifications: AWS Certified Solution Architect - Associate (AWS)