MANOHAR KAKUMANI

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WORK EXPERIENCE

Gannon University   **Erie, PA, USA**
Graduate Teaching Assistant   *Sep 2024 - Dec 2024*

- Supported setup and usage of self-hosted platforms including Coolify, Penpot, Supabase, Minio, and Bolt.new (AI). Utilized Cloudflare Tunnels for secure connections to virtual machines, enhancing infrastructure reliability and security.
- Built React.js front-end applications and deployed them on VMs using Docker, streamlining containerization and reducing deployment time by 40%.
- Provided students with hands-on guidance in React.js and Docker, leading to a 90% increase in proficiency levels

Freelance   **India**
Freelancer   *Jun 2022 - Jan 2023*

- Developed scalable back-end services with Python and Flask, creating secure RESTful APIs that boosted data retrieval speed by 25% and improved overall application performance.
- Deployed and maintained applications on AWS (including Amazon S3) and Microsoft Azure, optimizing cloud resources to reduce operational costs by 20% and enhance scalability.
- Configured and integrated SharePoint to streamline content management, increasing team productivity by 30% through improved collaboration and automated workflows.
- Deployed Jira on servers, customized forms for more efficient issue tracking, and integrated Jira webhooks with SharePoint cutting data collection and organization time by 40%.

Tata Consultancy Services   **Bangalore, India**
Assistant Systems Engineer   *Jan 2021 - Jun 2022*

- Built and maintained responsive React.js front-end applications for enterprise-level SAP solutions, leveraging modern JavaScript, React Hooks, and Redux to improve user experience and performance.
- Deployed applications on AWS (EC2, VPC, Load Balancers, S3) and configured CloudFormation templates to achieve consistent, repeatable, and secure infrastructure setups.
- Reduced page load times by 20% through code refactoring, efficient component structuring, and responsive design principles, enhancing overall application speed and quality.
- Integrated RESTful APIs, managed state effectively, and collaborated with cross-functional teams to select and implement AWS environments cutting deployment times by 25%.
- Provided hands-on technical support and proactive issue resolution, decreasing frontend troubleshooting times by 30% and ensuring a smoother, more efficient development lifecycle.

EDUCATION

Gannon University   **Erie, PA, USA**
Master of Science, Information Technology   *Graduation Date: Dec 2024*
Koneru Lakshmaiah Education Foundation (Deemed to be University)   **Guntur, AP, India**
Master of Science, Information Technology   *Graduation Date: Dec 2024*

SKILLS

Technical: JavaScript, ReactJS, React-native, ExpressJS, C, Python, Java, Elixir, HTML, CSS, REST API, Docker, System architecture, webhooks, Git, GitHub,TCP/IP, JIRA, Atlassian, Prompt Engineering, Generative AI, and LLMs Integration

Data Analysis: Google Analytics, SQL, Microsoft Excel

Product Development: Agile, MVP Creation, Use case/UML, Rapid Prototyping

Design & UX, Wireframing: Figma, Sketches, Canva
Cloud Platforms: AWS, Azure

PROJECT EXPERIENCE

Personal Project

Vehicle Breakdown Service App

- Developed a mobile app using the MERN stack to connect drivers with nearby mechanics or towing services.
- The app uses MongoDB's geolocation to find the closest service providers and Geoapify API for route planning. WebSockets enable real-time messaging between drivers and service providers, while users can easily book and manage service requests.
- The app integrates Stripe for secure payments, allowing users to pay for services within the app.
- JWT is used for secure user authentication, ensuring safe access to the platform.

Chat System

- Developed a full-stack video and text-based chat system using the MERN stack (MongoDB, Express.js, React.js, Node.js) along with WebRTC and WebSockets.
- This project demonstrates expertise in JavaScript programming for building real-time communication applications and integrating them with a database.
- The system allows users to engage in peer-to-peer video calls and instant messaging with predefined friends, showcasing skills in implementing real-time functionality and managing user relationships.

Mano: Networking Application

- Developed a networking application using Python, demonstrating proficiency in network programming.
- Implemented features for data communication, socket programming, and network protocol handling.

MyMo: A Byte Code Interpreter

- Created MyMo, a byte code interpreter written in C.
- This project showcases proficiency in low-level programming with C and involves the development of a bytecode interpreter.
- The interpreter is designed to execute bytecode instructions efficiently, demonstrating skills in system-level programming and understanding computer architecture.

Online Banking System: Terminal App

- Developed an Online Banking System as a terminal application using Java and SQL.
- This project demonstrates expertise in Java programming for building terminal-based applications and integrating them with a database.
- The system allows users to perform various banking operations through a command-line interface, showcasing skills in software development and database management.