Kausic Narayanan Manjappara Narayanan

Mauldin, SC | (650) 880-0373 | kausicmn@gmail.com | LinkedIn | GitHub | Portfolio

Education

California State University, Chico, USA **Dec 2023**
Master of Science in Computer Science GPA: 3.90

Anna University, India **May 2021**
Bachelor of Technology in Information Technology GPA: 3.57

Work Experience

Software Engineer – ZF Transmissions, Gray Court, United States **Nov 2023 – Present**

- Developed dashboard websites using React and Node.js, increasing engagement by 30% and saving $65,000 annually
- Deployed websites on Azure Web App and orchestrated the infrastructure using Terraform with Cosmos DB integration
- Integrated VNet, private endpoints, and custom DNS for secure network communication between Azure resources
- Implemented Azure AD for SSO authentication, streamlining user access management across applications
- Utilized Azure DevOps to set up and manage CI/CD pipelines, streamlining deployment processes for web applications
- Built a Python bot to monitor scrap rates and savings from the automated gear quality inspection system
- Automated report creation for Final Test Bench NOK analysis from MS SQL database using Python
- Created augmented datasets and ML models to forecast failure modes in gear traces, reducing scrap rates by 80%
- Managed the software flashing process for transmissions, ensuring the correct software is flashed to the transmission
- Actively contributed to teams, engaged in code reviews, and stayed updated with industry trends through training

Computer Science Tutor – California State University, Chico **Jan 2022 – Oct 2023**

- Worked closely with students and guided them through questions related to data structures and algorithms
- Analyzed and helped troubleshoot the code with students, shared best practices and provided feedback
- Exemplified analytical problem-solving skills through regular weekly office hours for students
- Skilled in breaking down complex concepts and making them easy to understand for students of all levels

Projects

Video Rental API – Personal Project **Jun 2023 - Aug 2023**

- Developed a video rental API using Node.js and Express.js, integrated with MongoDB, hosted on Amazon EC2
- Enforced JWT-based user authentication for secure access to the video rental API
- Implemented a CI/CD pipeline with Jenkins, Docker, Kubernetes for automated deployment
- Orchestrated AWS infrastructure using Ansible and Terraform, optimizing network and resource provisioning

Cloud Resume Challenge – Personal Project **Apr 2023 - May 2023**

- Developed a cloud-based resume website using AWS services, showcasing HTML, CSS, and JavaScript skills
- Deployed the website as a static site on Amazon S3, secured with HTTPS using Amazon CloudFront
- Implemented a visitor counter using DynamoDB, API Gateway, and Lambda with Python and AWS SDK (boto3)
- Automated Terraform configuration with CI/CD using GitHub Actions for seamless infrastructure deployment

Video Game Discovery App – Personal Project **Jan 2023 - Apr 2023**

- Developed a video game discovery app using React and RAWG API, with advanced filtering and dark mode option
- Built a clean and responsive user interface with Chakra UI for easy navigation and improved user experience
- Deployed the app on Amazon EC2 for high availability, scalability, and reliability
- Implemented CI/CD using AWS Code Pipeline for automated build, test, and deployment

Organizer – CSU, Chico **Aug 2022 - Sep 2022**

- Designed a full stack Organizer web service using HTML, CSS, JavaScript, Bootstrap, Django & Python
- Developed a web-based task manager and expense tracker to efficiently manage tasks and expenses
- Utilized Docker to containerize the application for easy deployment and portability
- Demonstrated cloud expertise by deploying web app on Google Cloud Compute Engine

Wildfire Prediction using Artificial Neural Network – CSU, Chico **Jan 2022 - May 2022**

- Pre-processed weather and fire data with Geopandas to extract geospatial features
- Explored Scikit-Learn models and identified MLP as best for predicting wildfires
- Analyzed and visualized data with Matplotlib and Seaborn to guide model development
- Developed an accurate wildfire prediction model using MLP achieving 90% accuracy

Certifications

- AWS Certified Cloud Practitioner
- AWS Certified Solutions Architect Associate
- HashiCorp Certified Terraform Associate

Technical Skills

Languages: C, C++, Python, JavaScript, TypeScript, HTML, CSS, Dart
Database & Cloud: MySQL, MongoDB, AWS, GCP, Firebase, CI/CD, Jenkins, Ansible, Terraform
Frameworks: Docker, Kubernetes, React, Django, Bootstrap, Scikit-learn, Flutter, Node.js
Tools: Eclipse, IntelliJ, VS Code, Microsoft Visual Studio, GitHub, Google Colab, Jupyter Notebook