KRITIKA PARAJULI

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EDUCATION

Bachelors of Science in Software Engineering; Minor in Mathematics   Dec 2025
State University of New York (SUNY) at Oswego | Oswego, NY
GPA: 3.7; President's list: Spring 2022, Fall 2022, Spring 2023, Spring 2024
AWS Academy Graduate - AWS Academy Cloud & Security Foundations

SKILLS

Programming & Scripting Languages:
Java, C, Go, Python, JavaScript, TypeScript, C++

Tools:
Amazon AWS, Docker, Loggly, MongoDB, React, Postman, JMH, GIT (Github & Gitlab), Jira, Trello, Gantt Charts, UML, KAOS

RELEVANT EXPERIENCE

Software Engineer Intern   Jun 2024 - Aug 2024
Jobs4Interns | Chantilly, VA
- Developed and optimized data storage and retrieval process using MongoDB, ensuring 30% performance improvement
- Conducted API testing and reliability analysis, ensuring system stability across environments
- Designed efficient state management for front-end interfaces using React.js, enhancing user experience

Research Intern   Jun 2024 - Aug 2024
Computer Science Department at SUNY Oswego | Oswego, NY
- Led research on software specification models and frameworks, focusing on requirements engineering
- Analyzed KAOS Goal models and UML diagrams to evaluate system data flow and architecture and to quantify model comprehension and performance
- Managed a team using Agile methodologies and sprint planning, optimizing tools such as Jira, Gantt charts, Trello, optimizing team efficiency and deliverables

RELEVANT PROJECTS

AWS Deployment   Fall 2024
- Automated the deployment of containerized applications using Amazon ECS and CodeDeploy, improving efficiency and consistency of application rollouts
- Configured and optimized AWS EC2 instances and Docker containers, while manually deploying the application to understand the deployment behind the scenes
- Implemented comprehensive monitoring and logging solutions with Amazon Cloudwatch and Loggly, to track performance, troubleshooting deployment inssues, and ensuring operational transparency

Genetic Algorithm Implementation   Fall 2024
- Developed a multi-threaded genetic algorithm in Java, optimizing facility layout using parallel processing across 100 threads for faster computation
- Implemented thread-safe mechanisms using various data structures, timers and locks, ensuring data integrity and synchronization across parallel processes
- Optimized algorithm performance with custom mutation and crossover functions based on the facility needs, accurately solving the layout problem

Envisionary - Fullstack Application   Spring 2023
- Developed and integrated automation solutions in a web application that allowed users to manage predictions in real-time data analysis to meet the stakeholder requirements
- Implemented real-time data tracking and analysis, pulling information from multiple APIs to automate data collection and synchronization, improving accuracy in the data received by the users
- Maintained a Software Requirements Specification (SRS) document, systematically tracking system requirements and presented weekly updates to stakeholders based on those specifications

LEADERSHIP EXPERIENCE

Career Peer Intern   Aug 2024 - Present
SUNY Oswego Career Services
- Led and coordinated workshops, providing structured guidance on resume optimization and Linkedin strategies, enhancing student's job application success rates
- Assisted in project coordination and reporting, ensuring efficient documentation of employer partnerships and workshop outcomes to improve program scalability
- Networked with employer partners to organize events and information sessions, providing students with direct access to job and internship opportunities

Resident Assistant (RA)   Jan 2023 - Present
Residence Life and Housing
- Implemented and enforced policies and safety protocols, ensuring compliance with the organization needs, while effectively resolving conflicts, demonstrating strong analytical, problem-solving, and leadership skills
- Coordinated and led periodic meetings and programs focused on the diverse group of residents, ensuring clear communication and organization while fostering an inclusive environment that respects diverse cultural backgrounds