**Akshaya Reddy Pulla**

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**EDUCATION**

**University of Florida** (CGPA - 3.92/4.0) **Gainesville, FL**

*Master of Science, Computer Science 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**

**Professional Summary**

* 5 years of experience as a Software Engineer and Java Developer, specializing in Java 17, Spring Boot Microservices, and full-stack development, delivering scalable and high-performance systems.
* Extensive experience in designing and optimizing backend systems using Java, Spring Framework, and Spring Data JPA, achieving a 30% boost in performance and scalability across distributed environments.
* Proven ability to build secure and efficient RESTful APIs, implementing OAuth, JWT, and IAP token-based authentication to ensure robust data protection and compliance with security standards.
* Proficient in cloud computing with AWS and GCP, utilizing Docker, Kubernetes, and Terraform to deploy and manage Java-based applications, reducing infrastructure setup times by 40%.
* Hands-on experience in front-end development using Angular.js and React, contributing to full-stack projects by creating responsive UIs that increased user engagement by 25%.
* Strong expertise in CI/CD pipelines, leveraging tools like Jenkins, Git, Docker, and AWS CodePipeline to streamline development processes and enable continuous integration and delivery.
* In-depth knowledge of automated testing and code quality assurance using Java testing frameworks such as Junit and Mockito, ensuring reliable, maintainable, and high-quality software.
* Experienced in Agile methodologies, working in cross-functional teams to drive iterative development cycles, and delivering Java-based applications that meet business needs and enhance user experience.

**EXPERIENCE**

**Fujitsu America -*****Java Full Stack Developer* Richardson, Texas**

***Tech Stack****: Java 17, Spring Boot, Angular.js, REST, SOAP, Cassandra, Docker, Kubernetes, AWS, GCP**April 2023 – May 2024*

* Achieved a 30% performance improvement in backend services by leveraging Java 17, optimizing code structures, and refactoring legacy components within Spring Boot Microservices architecture.
* Designed and implemented microservices that handled high traffic with distributed caching and load balancing, ensuring system reliability under heavy loads.
* Utilized OAuth 2.0, JWT, and Identity-Aware Proxy (IAP) token-based authentication to secure APIs, enhancing application security and ensuring compliance with industry standards.
* Led the development of modular and reusable code using the Spring Framework, including Spring Data JPA and Spring Security, to streamline application development.
* Spearheaded the creation of responsive and dynamic front-end interfaces using Angular.js, resulting in a 20% increase in user engagement and an enhanced user experience.
* Boosted website traffic by 30% through the application of modern UI/UX principles, implementing ES6, HTML5, CSS3, jQuery, and Bootstrap for cross-platform compatibility and performance.
* Engineered and deployed scalable APIs using RESTful web services and SOAP, with a focus on optimizing JSON data processing and reducing latency in distributed systems.
* Leveraged AWS and GCP cloud platforms to design and maintain scalable infrastructure, ensuring high availability and disaster recovery with automated failover mechanisms.
* Designed, implemented, and managed Kubernetes clusters for container orchestration, ensuring zero downtime during deployments and enhancing application scalability.
* Integrated NoSQL databases such as Cassandra into the microservices architecture, ensuring fault tolerance, data replication, and scalability across distributed systems.
* Applied Agile methodologies, including SAFe, to lead cross-functional teams in iterative development cycles, delivering high-quality features within tight deadlines.
* Enhanced CI/CD pipelines by automating build, test, and deployment processes using Git, Jenkins, Docker, and Kubernetes, reducing release times and improving code quality.
* Conducted thorough unit testing and API security audits, utilizing Mockito and Junit frameworks to ensure that the codebase met high standards of reliability and security.
* Led the implementation of best practices for version control, code reviews, and branching strategies using Git, contributing to team productivity and codebase maintainability.
* Collaborated closely with DevOps teams to ensure seamless integration of application development and operations, optimizing cloud resources and monitoring systems effectively.
* Continuously researched and adopted emerging technologies and tools in cloud computing, microservices architecture, and software development, staying ahead of industry trends.

**L&T Technology Services - *Software Engineer* Bengaluru, India**

***Tech Stack****: Python, AWS, Terraform, React, HTML5, JavaScript, Figma, Django, Flask, Jenkins, Docker May 2018 – Oct 2021*

* Enhanced scalability and reliability of IoT gateways by 30% through deep integration with AWS IoT Core, effectively addressing and overcoming specific performance bottlenecks.
* Optimized deployment and configuration processes using Python, AWS CloudFormation, and Terraform, reducing setup times by 40% and ensuring consistent and repeatable environment setups.
* Designed and implemented ADA-compliant, responsive user interfaces with React and CSS, resulting in a 20% faster login process and a 25% increase in user engagement by improving accessibility.
* Developed high-performance backend systems for IoT gateways using Node.js, Django, and Flask, integrating AWS Lambda and API Gateway to achieve a 40% increase in data processing speeds.
* Automated the deployment and management of Legato applications through shell scripting, leading to a 40% boost in productivity and a 30% acceleration in project completion times.
* Revamped workflow efficiency and code quality by 30% using Git for version control, JIRA for project management, and Confluence for documentation, fostering better collaboration and transparency.
* Streamlined continuous integration and continuous deployment (CI/CD) pipelines with Jenkins, Docker, and AWS CodePipeline, reducing deployment times by 40% and improving overall development speed.
* Improved testing efficiency and build quality using Selenium for automated testing, Python for scripting, and C++ for backend components, leading to higher software quality and reliability.
* Architected serverless applications leveraging AWS Lambda and API Gateway, reducing infrastructure management overhead and enhancing system scalability and performance.
* Utilized AWS services such as S3, DynamoDB, and SNS to develop distributed, fault-tolerant IoT systems, ensuring high availability and resilience against failures.
* Led efforts to improve team collaboration and productivity by implementing automation tools and processes, cutting down manual tasks and allowing for more focus on high-value work.
* Developed and maintained infrastructure as code (IaC) templates using Terraform and AWS CloudFormation, enabling consistent and automated provisioning of cloud resources.
* Integrated Python scripting and AWS SDKs for automation of cloud operations, improving operational efficiency and reducing the need for manual intervention.
* Applied Agile principles and frameworks to drive iterative development cycles, ensuring that new features and improvements were delivered on time and met stakeholder expectations.
* Collaborated with cross-functional teams to optimize cloud-native applications, focusing on improving performance, reducing latency, and enhancing overall user experience across platforms.

**BCITS PVT LTD -** *Software Engineer Intern* **Bengaluru, India**

***Tech Stack****: React.js, Express.js, Node.js, Socket.io, OpenCV, MongoDB, PostgreSQL, IoT, Figma. Oct 2017 – April 2018*

* Solely designed and orchestrated a full-stack MERN application with integrated IoT for cloth factories, fully eliminating traditional paperwork by digitizing the entire process and streamlining factory operations.
* Engineered a dynamic and highly interactive web dashboard utilizing Socket.io and React, enabling real-time visualization of key performance indicators, and providing factory managers with immediate insights into operations.
* Integrated Secure Vision technology with IoT devices to ensure secure and efficient data transmission between factory machines and the central system, minimizing latency and ensuring data integrity.
* Developed a real-time backend using Node.js and Express, leveraging MongoDB for scalable data storage, ensuring that the application could handle high data throughput from multiple IoT devices.
* Implemented robust authentication and authorization mechanisms using JWT and OAuth2, ensuring that the application met stringent security requirements and protected sensitive factory data.
* Optimized the data flow from IoT devices to the web dashboard, reducing data lag and improving the responsiveness of the application, enhancing real-time decision-making capabilities.
* Reduced manual errors and improved operational efficiency by integrating IoT sensors with the application, allowing for automated data collection and reducing reliance on manual input.
* Achieved a significant reduction in factory downtime by providing real-time alerts and notifications to factory managers through the web dashboard, enabling quick response to critical issues.
* Architected the system to be scalable and maintainable, using a microservices-based architecture that allowed for easy updates and the addition of new features without disrupting existing operations.
* Leveraged cloud-based services to ensure that the application could be accessed from multiple locations, providing factory managers with flexibility and remote control over operations.
* Developed custom APIs to interface between IoT devices and the application, ensuring seamless communication and real-time data transfer across different parts of the factory.
* Implemented data analytics and reporting features within the dashboard, allowing factory managers to track performance trends over time and make data-driven decisions.
* Ensured compliance with industry standards and best practices for IoT security, incorporating encryption and secure protocols for all data transmissions between devices and the application.
* Conducted thorough testing of both the front-end and back-end components, using automated testing frameworks to ensure the application was reliable, secure, and performant in a production environment.
* Collaborated with factory personnel to tailor the application to their specific needs, ensuring that the digital transformation process was smooth and effectively addressed the challenges of traditional paper-based workflows.

**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, Flask, TailwindCSS, HTML, Selenium, Docker, Jenkins, Kubernetes.

**Databases:** MySQL, PostgreSQL, Oracle, SQL Server, NoSQL, DynamoDB, MongoDB, Informix, Spanner DB, Cassandra.

**Cloud**: AWS, DynamoDB, RDS, Lambda, CloudFront, S3, ElastiCache, CloudWatch, SQS, SNS, CloudFormation, CodePipeline.

**CI/CD & Version Control**: Maven, Jenkins, Ansible, Terraform, Git, Bitbucket, GitHub, DevOps, Docker, Team city.

**Visualization**: Tableau, Looker Grafana, Cloudwatch.

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