Radha Krishna Kasyap Pasumarthy

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EDUCATION

SUNY Stony Brook University, Stony Brook, NY   *Aug 2023 – Dec 2024*
Master of Science in Computer Science   *GPA: 3.78/4.00*

SKILLS SUMMARY

- **Programming Languages:** Java, Python, C++, JavaScript, C, SQL, NoSQL, Go, HTML, CSS
- **Technologies/ Frameworks:** Spring Boot, Hibernate, Django, Maven, ELK Stack, Node.js, Express, Angular, React
- **Cloud/ DevOps:** AWS, Azure, Docker, Kubernetes, Helm, Jenkins, Git, ArgoCD, Jira, Terraform, Ansible, CircleCI, Gitlab, Bitbucket
- **Data Management and Analysis:** PostgreSQL, MySQL, MongoDB, Cassandra, Kafka, Zookeeper, Aqua Data Studio, RabbitMQ
- **Tools and Frameworks:** Splunk, Celery, Elastic Search, Swagger, Postman, JUnit, Mockito, SonarQube, TensorFlow, RESTful Web Services, Version Control, Agile Methodologies, Plotly, OAuth, JWT, Prometheus, Grafana, Distributed Systems

EXPERIENCE

Stony Brook University   Jan 2024 - Present
Research Assistant   *United States*

- Building a full-stack Mental Health Tracker using **React**, **Redux**, **Spring Boot**, and **MSSQL**, with **Highcharts** for data visualization.
- Integrated **LLMs** and **TensorFlow.js** for sentiment analysis and personalized mental health recommendations, aiming for 85% accuracy.
- Optimized workflows with **Celery** and **Amazon S3**, reducing task time by 30%; secured data with **AWS KMS** encryption and **VPC.**

BlackRock   Jul 2022 - Aug 2023
Analyst   *India*

- Automated financial document delivery for 50+ Transfer Agents utilizing **Python**, **Azure Blob Storage** for file management, and **NiteJobs** and **Polars** for scheduling, reducing manual tasks by 40% and streamlining operations.
- Modernized a legacy reporting system by developing a web application with **Spring Boot REST APIs** for the backend, **Angular** for the frontend, and **Cassandra** for database management, eliminating manual script execution and reducing client data retrieval time by 50%.
- **Led daily coordination meetings** with business teams, addressing migration challenges and demonstrating application UI and features, resulting in a 30% increase in client adoption and a 40% improvement in overall efficiency.
- Enhanced system observability using **Azure Monitor** and **Log Analytics**, cutting debugging time by 40%. Implemented **CI/CD pipelines** with **Azure DevOps** and **Azure Automation** for configuration management, reducing deployment times by 50%.
- Designed a **microservices** architecture for cash management with **Java**, **Spring Boot**, and **Hibernate** for data handling. Utilized **Kafka** for event-driven communication, and **Prometheus** and **Grafana** for monitoring, boosting system reliability by 25%.
- Upgraded a financial analysis application from **Java 7** to **Java 17**, integrating **JUnit** and **Mockito** for automated testing and **SonarQube** for continuous code quality and vulnerability mitigation, resulting in a 30% performance increase.
- Established **CI/CD** workflows with **Jenkins**, **Docker**, and **Helm** for Kubernetes deployments, and **terraform** for infrastructure as code, optimizing deployment processes and achieving 20% cost savings in resources.

BlackRock   Jan 2022 - Jun 2022
Software Engineer Intern   *India*

- Developed a **Proof of Concept (PoC)** for a **distributed microservices architecture** for a low-code platform, enhancing development speed by 50% and enabling scalable application development.
- Automated infrastructure provisioning on **Azure** using **Terraform,** reducing manual configuration errors by 50% and accelerating deployment speed by 2x for **Azure Virtual Machine** instances and **Azure Blob Storage** buckets.
- Implemented continuous deployment pipelines with **Argo CD and Helm** on **Azure AKS,** reducing deployment failures by 40%.

ProDevBase   Dec 2020 - Dec 2021
Software Developer Engineer   *India*

- Engineered scalable backend solutions utilizing **Java** and **Spring Boot** in a microservices environment, ensuring efficient data flow and high system availability across distributed components.
- Collaborated with **cross-functional** teams to define requirements and implement database solutions (**MySQL, PostgreSQL**), incorporating **Kafka** for seamless real-time data streaming.
- Developed **REST APIs** to facilitate communication between **distributed services**, optimizing performance through code refactoring, thorough testing, and adherence to industry best practices.

PROJECTS

Career Quest

- Built a robust job portal using **Java**, **Spring Boot**, **React**, and **Hibernate**, implementing **ElasticSearch** to enhance search functionality.
- Developed and optimized **RESTful APIs** with **JWT** for authentication and **PostgreSQL** for efficient data management.
- Utilized **Docker and Kubernetes** for containerization and orchestration, deploying with **Helm** on **AWS**. Automated CI/CD pipelines with **Jenkins**, **ArgoCD**, and **Terraform**, **Prometheus** and **Grafana** for real-time monitoring, centralized logging with the **ELK stack**.

Distributed Banking System

- Implemented a modular and scalable **microservices** architecture using **Java**, **Spring Boot**, and distributed database **Cassandra**.
- Utilized **Apache Kafka** for asynchronous communication and **RPC**, ensuring decoupling and improved data flow management.
- Employed **Zookeeper** for service discovery and coordination, used **Docker** and **Kubernetes** for consistent and scalable deployments.
- Developed robust **RESTful APIs** for inter-service communication and client interactions, monitored with **Prometheus** and **Grafana**.
- Ensured system reliability through **GitHub Actions** for **CI/CD**, complemented by comprehensive testing with **JUnit** and **Mockito**.