BALA VAMSI MARAGANI
Java Full-Stack Developer

imbalavamsi@gmail.com | +1 (201) 985 – 4069 | East Newark, NJ(Open to relocate) | AWS solution Architect Certified | Portfolio

CAREER SUMMARY

- Over 5 years of IT experience as a **Java Full Stack Developer** in developing Full-Stack Applications and scalable applications across diverse domains including Pharma, Banking & Financial Services, and Retail/E-commerce, using **Java/J2EE** technologies.
- Proficient in implementing **OOPs** and **Core Java concepts** including **multithreading**, **exception handling**, **collections**, **serialization**, **file handling**, **JDBC**, and design patterns, with proven experience in developing secure, efficient RESTful APIs.
- Successfully migrated legacy monolithic applications into **containerized microservices** architectures using **Spring Boot**, **Docker**, **Kubernetes**, and implemented robust service discovery and centralized configuration with seamless **CI/CD** integration.
- Direct experience in building scalable backend applications using Spring Boot modules (Spring MVC, Spring Data JPA, Spring Security, Spring Web Flux, Spring Batch), **Hibernate** ORM, and asynchronous messaging with **Apache Kafka** and **RabbitMQ**.
- Proficient in applying **Design patterns** such as Singleton, MVC, DAO, Observer, Saga, CQRS, and Decorator.
- Firsthand experience on ELK Stack (**Elasticsearch**, **Logstash**, **Kibana**) for monitoring and logging in distributed environments.
- Proficient in developing dynamic, responsive **UIs** using **AngularJS**, **React.js**, **JavaScript (ES6+)**, **HTML5**, **CSS3**, and **Bootstrap**.
- Engineered dynamic **Angular** modules using lazy loading, reactive forms, and RxJS observables to optimize load performance and streamline complex user workflows in enterprise-grade risk assessment dashboards.
- Strong experience in implementing event-driven architectures using **Apache Kafka** for real-time messaging, log processing, and **asynchronous** microservice communication.
- Utilized **Redis** as an in-memory data store to implement distributed cache and session management strategies for high-throughput enterprise applications, reducing database load and improving **API** response times by up to 80%.
- Integrated **AI/ML capabilities into Spring Boot applications** using **Spring AI**, **LangChain4J**, and **OpenAI APIs**, enabling semantic search, **LLM** orchestration, and retrieval-augmented generation (**RAG**) with **Elasticsearch** vector stores.
- Strong database skills with experience in **Relational** and **NoSQL** databases like **MySQL**, **PostgreSQL**, **Oracle**, and **MongoDB**.
- Proficient in Database concepts such as schema design, transactions, indexing, **PL/SQL**, triggers, and stored procedures.
- Worked with the **NoSQL** Database like **MongoDB** to manage extremely large data sets.
- Strong hands-on experience with **AWS** services **IAM**, **EC2**, **S3**, **Lambda**, **CloudWatch**, **CloudTrail**, **SQS**, **SNS**, and **Autoscaling**.
- Solid programming experience in Java for backend, **REST API**, and developing serverless applications using **AWS Lambda**.
- Deployed and managed containerized microservices on **Red Hat OpenShift**, leveraging **Kubernetes** orchestration.
- Integrated **CI/CD** pipelines on **OpenShift** using **Jenkins** and **Lightspeed Harness** with 99.9% uptime and rollback readiness.
- Skilled in working with modern **IDEs** like IntelliJ IDEA, Spring Tool Suite (STS), Eclipse, and Visual Studio Code.
- Proficient with automation and API testing using **Postman**, **Swagger** and continuous code quality analysis using **SonarQube**.
- Expertise in writing unit and integration test cases using **JUnit5**, **Mockito**, and **SOAP UI** with both TDD and BDD approaches.
- Implemented end-to-end CI/CD workflows using **Jenkins** pipelines, **Docker** registry integration, **Kubernetes** orchestration, and microservices deployments in cloud and hybrid environments.
- Experienced in **Agile/Scrum** development, test-driven development (**TDD**), and **DevOps** workflows including **Jenkins** pipelines, **Lightspeed Harness**, **GitHub Actions**, **Docker**, and **Kubernetes**.
- Well-versed in the complete Software Development Life Cycle (**SDLC**) including requirement analysis, design, coding, testing, deployment, and maintenance, using **Agile** methodologies.

TECHNICAL SKILLS

- **Programming Languages**: Java 8, Java 17, Python, JavaScript (ES6+), TypeScript, SQL, PHP.
- **Java/J2EE Technologies:** JSP, Servlets, JDBC, Hibernate, JSF, JMS, Struts 2.x, Web Services
- **Frontend Development:** ReactJS, AngularJS, HTML5, CSS3, Bootstrap, Tailwind CSS.
- **Backend Development:** REST/SOAP APIs, Micro services, Spring Boot, Spring Data JPA, security, Hibernate, Flask.
- **Database Management:** MySQL, PostgreSQL, Oracle, Redis, MongoDB, H2.
- **DevOps/CI/CD**: Docker, Jenkins, Kubernetes, Git, GitHub Actions, Azure DevOps, OpenShift, Harness.
- **Cloud Platforms**: AWS (EC2, S3, RDS, Lambda), Azure (App Services, VMs, Blob Storage), Google Cloud Platform.
- **Testing**: Junit5, Mockito, Selenium, Postman, Swagger.
- **Messaging Queues**: Apache Kafka, ActiveMQ.
- **Security**: OAuth, JWT, SSL/TLS, Data Encryption, Web Security Protocols.
- **Project Management** : Agile methodologies, Scrum, Kanban, JIRA, Confluence.
- **Design & Architecture**: Microservices architecture, MVC, Design Patterns, UML, Serverless Architecture.

PROFESSIONAL EXPERIENCE
Java Full Stack Developer | Daiichi Sankyo (Basking Ridge, NJ) | Pharma & Health Care Services   Mar 2025 – Present

- Engineered secure **Spring Boot microservices** for end-to-end pharma workflows—including drug research, inventory tracking, manufacturing, and regulatory approvals—while implementing profiling for multiple environments (dev, QA, UAT, prod).
- Primarily utilized JDK 17, and Java 8, 11 features such as **lambda expressions**, **streams**, **optional**, **var**, **records**, and **sealed classes** to reduce boilerplate, and improve maintainability across inventory management application and tracking APIs.
- Developed **Kafka**-based pipelines for inter-team communication across **R&D**, manufacturing, and legal units, enabling real-time visibility into experiment status and approvals.
- Provided **production support** for issue resolution, hotfixes, and uptime monitoring.
- Built **ReactJS** dashboards with nested routes, filters, and data grids to visualize compound testing results with timelines.
- Designed dynamic user role management (scientist, admin, reviewer) with RBAC security and **JWT**/**OAuth2** for authentication.
- Improved backend throughput by 55% using **PostgreSQL** index tuning and **Redis cache** on high-traffic endpoints.
- Deployed containerized workloads on **OpenShift** with auto-scaling policies to support high **RPS** in data-heavy modules.
- Conducted encryption implementation to meet **HIPAA** standards and automated audit logging for regulatory submissions.
- Worked with **QA** teams to define **TDD** scenarios and reduce regression defects across modules during frequent releases.
- Led **Agile** ceremonies, collaborated closely with product owners for backlog refinement and sprint planning, and maintained project documentation using **Jira** and **Confluence**.

Lead Java Developer | Citi Group (Rutherford, NJ) | Banking and financial services   Sep 2024 – Dec 2024

- Spearheaded the deployment of containerized applications on the **OpenShift** platform by leveraging **Docker**, **Kubernetes**, and **CI/CD** pipelines with **Jenkins** and **Lightspeed Harness**. Achieved 99.9% uptime by implementing **DevOps**-driven workflows.
- Integrated **JMeter** for load testing and **SonarQube** to maintain 80% code coverage and enforce coding standards.
- Developed 10+ **RESTful APIs** to handle **CRUD** operations using **Java 17**, **Spring Boot**, **Hibernate ORM** with **SQL** Databases.
- Collaborated with **UI/UX** teams to support **Angular** automate 70+ user lifecycle processes with synchronized jobs.
- Leveraged **Apache Kafka** for event payloads, data communication between microservices, email notifications, and system logs.
- Enhanced the **ERM** application performance by 60% utilizing **Redis Cache**, **ehcache** and **DB** indexes handling concurrent users.
- Led weekly **release lifecycle management** including hotfix approvals, runbook creation, build deployments, and thorough smoke testing, maintaining 99.9% production uptime.
- Worked cross functional with **DB** team to ensure no data/schema mismatches and **frontend** team for no **API** integration gaps.
- Participated in testing with **QA** for **SIT** signoffs and collaborated with **Product Owners** and **Business Analysts** for **UAT** cycles.
- Maintained code quality gates, handled pull requests, and deployed builds across **dev**, **UAT**, and **production** environments while ensuring traceability and rollback preparedness.
- Mentored junior developers, conduct knowledge transfer sessions, documented processes on Confluence, and maintained clean, review-approved code across multiple **Git repositories**.
- Managed feature delivery by participating in **Sprint ceremonies**, understanding business requirements, and transforming into technical tasks, estimating task efforts, refining backlog, and allocating work based on team bandwidth.

Java Full-Stack Developer | Epsilon (Pittsburgh, PA) | Health care services   Aug 2023 – Aug 2024

- Involved in the full software development life cycle(**SDLC**) from gathering requirements to building, testing and maintenance of the application depending on the business using **Agile** methodologies.
- Developed robust backend services using **Java 17, Spring Boot**, **Spring Web**, **Spring Data JPA**, **Hibernate**, and **Apache Kafka** for asynchronous messaging and real-time data processing.
- Developed 20+ RESTful APIs using Java 17, applying core Java features like **Multithreading**, **Streams API**, **Parallel Streams**, **Lambda Expressions**, and **Functional Interfaces**, enhancing backend efficiency, and delivering smoother user experience.
- Utilized **Docker** and **Kubernetes** for **containerization** and **microservices orchestration**, facilitating **CI/CD** pipelines that reduced deployment time and enabled real-time system scaling.
- Optimized backend performance by utilizing **asynchronous programming** and database techniques in **PostgreSQL** and **MongoDB**, minimizing data retrieval times, and enhancing overall system efficiency.
- Built **ReactJS** components enabling **A/B** testing of health messaging, call-to-actions, and banner placements.
- Built interactive **ReactJS** pages with CRUD operations, search, sort, pagination, form validation, and reusable components using **Hooks** and **Context API** for state management, enhancing user interactivity and UI performance.
- Created custom filter in **ReactJS** in the application and developed the rich **UI** components in Optimizely.
- Used **ES6** and **JSX** with react for component development with **ReactJS**.

- Maintaining Parent and child elements by using State and Props in **ReactJS**.
- Led data security and compliance initiatives, implementing encryption protocols and **JWT**-based authentication to safeguard user information in alignment with HIPAA, GDPR, and CCPA regulations.
- Applied Test-Driven Development (**TDD**) methodologies to ensure code reliability and reduce errors by 20%, significantly improving the overall quality of deliverables.
- Used JIRA to track the bugs/ issues. Involved in SCRUM and **AGILE** meetings to discuss the status of the project.

Full Stack Developer | Dakota State University (Madison, SD) | Learning Management Services   Jan 2023 – Aug 2023

- Developed a **MERN** stack (**MongoDB**, **Express.js**, **ReactJS**, **Node.js**) web app with **AWS** Code Pipeline and deployed it on **AWS EC2** with 90% downtime reduction. Implemented monitoring using **Amazon CloudWatch** and **AWS CloudTrail**.
- Employed **HTML5**, UTF-8 encoding, **CSS** (external, embedded, inline), **JavaScript**, and **TypeScript** for enhanced functionality.
- Utilized **Amazon S3**, **Amazon Document DB**, **AWS CloudFront** for optimized content delivery performance.
- Design, develop, and implement **Python**-based applications that meet business requirements and performance goals.
- Collaborate with cross-functional teams to understand requirements, propose solutions, and deliver high-quality software.
- Preferred experience with **UI** integration and interfacing with **ReactJS**.
- Designed a **Flask**-based blog application with user authentication using **Python** v3, leveraging **SQLite** v3 and distributed storage for efficient CRUD operations and seamless **REST API** integration.
- Applied strong computer science principles to provide seamless user experience, rigorously ensuring robustness and reliability through unit testing with **JUnit5** and **Mockito**.

Software Development Engineer | Accenture (Hyderabad, TS) | Retail/E-commerce   Feb 2021 – Dec 2022

- Employed e-commerce platform by harnessing **SAP Hybris Commerce** Accelerator for **B2C** business models using **J2EE** technologies (SAP Hybris, Spring Data JPA, Spring MVC, Hibernate, JDBC, JavaBeans) for backend development.
- Developed 30+ **REST APIs** with **Core Java SE 11** features such as **Multithreading**, **Parallel Streams**, **Streams API**, **Functional Interfaces**, and **Lambda Expressions** by leveraging computer science concepts for smoother user experience.
- Ansible and **Docker** for Build, deploy, continuous integration to help developers work in an **Agile** environment.
- Developed **POJO objects** and used **Hibernate** as the **ORM** tool to access the persistent data from **SQL** Server.
- Consumed messages from **JMS**-Message driven **beans** and **Active MQ**, integrated the services with **Beans**.
- Leveraged **Log4j** and **SLF4J** for **logging**, **Swagger**, **Postman**, **Kibana logs**, **Dynatrace**, and browser consoles for root cause analysis and instantly provided bug fix while working as a production support specialist in a demanding environment.
- Designed and scheduled **cron jobs** with **multithreading** and custom **exception handling** to process time-sensitive tasks, detect fraudulent transactions, and clean up obsolete data for improved system reliability.
- Implemented the following **J2EE Patterns**: Front Controller, Session Façade, Service Locator, Data Access Object, Business Delegate, Business Object, Composite View, and View Helper.
- Designed, developed, implemented, and maintained custom **Ant** tasks in **Java** and **Groovy** Experience in **Microsoft Azure Cloud Computing** development and support.
- Developed the service where **Microsoft Azure** storage is used to store the **blob** files.
- Developed the **Azure Active Directory (**AAD) **authentication** and **OAuth authorization** for API security.
- Proficient in IntelliJ IDEA and unit testing, achieving 90%+ code coverage with **JUnit5** and **Mockito**.
- Worked on **Azure** pipelines for **CI/CD** configurations, produced 200+ pull requests using **Git** command line, and **SourceTree**.
- Experienced with **Jira** for **Agile/Scrum** and Confluence for project management and documentation.

Jr. Software Engineer | Omkara (Hyderabad, TS) | Retail/E-commerce   Mar 2020 – Jan 2021

- Initiated and led analysis of business sales, distribution, and marketing needs, planned budget and maintenance strategy for long-term handover to non-technical users.
- Developed a Spring boot application with **Java8** for backend and **ReactJS**, **HTML**, **CSS**, and **JavaScript** (**ES6**) for front-end.
- Developed dynamic web pages using **HTML**, **CSS**, **JSP**, **JavaScript**, **and jQuery** to design the UI for monolithic applications.
- Deployed full-stack application on **AWS** using **S3** buckets, **EC2** instances, and subnets while collaborating with Agile team.
- Built reusable and modular **ReactJS** components using hooks (**useState**, **useEffect**) to improve performance and reduce code duplication across multiple **UI** screens.
- Integrated **RESTful APIs** into **ReactJS** frontend using **Axios** and managed state using Context API for consistent data flow.
- Used **JMS** (Java Messaging Service) API to mail notifications upon success or failure when the backend processes are completed and to send mail notifications regarding any system-related problems.

- Configured **JBOSS** Application server and used **Oracle** database with **Hibernate ORM** framework and used the functionalities of **Hibernate** second level Ehcache.
- Used **Spring Web Flux** for reactive programming and implemented **Swagger API** documentation for API testing and clarity.
- Implemented business process, database retrievals, access information and **User Interface** using **Java**, **Struts**.
- Firsthand writing **Stored Procedures**, **functions**, **triggers**, **DDL**, **DML** SQL queries.
- Created SQL queries, **PL/SQL** Stored Procedures, Functions for the Database layer by studying the required business objects and validating them with Stored Procedures using **DB2** and Promoting DML scripts to **DB2**.
- National level complex problem-solving competition, using **JAVA**, **Data Structures**, and **Algorithms**.
- Used mocked test card numbers and temporary email accounts to simulate and validate user behavior, detect fraudulent transactions, and ensure secure flows.
- Collaborated with stakeholders to develop a website, resulting in a more than 30% increase in sales and profits.

PROJECTS [Feel free to visit my GitHub for more projects]

Image Caption to Voice Generation Using Deep Learning: Analysis, design and testing [**Publication URL**]

- Developed a **Full-Stack web app** that converts image captions to voice using **Deep Learning**, integrating Computer Vision (**VGG16**) and **NLP** (**LSTM**) models.
- Designed a responsive frontend (**HTML5**, **CSS3**, **JS**, **Bootstrap**) for accessible user interaction.
- Built the system using **Python**, **NumPy**, **Pandas**, **OpenCV**, and deployed training on **Google Colab** with **Jupyter Notebook** for iterative experimentation. Enabled real-time speech via **Google Text-to-Speech** (**gTTS**).

Checklist Application [GitHub-Repo]

- Built using **Spring Boot 3** (**Java 17**) with **Spring Data JPA**, **Lombok**, and **Swagger** for **REST API** development.
- Frontend developed using **HTML5**, **CSS3**, and **JavaScript** (**ES6+**) with Fetch API for async requests.
- Supports **CRUD** operations, task search, client-side form validation, and versioned task updates.
- Includes strikethrough **UI** for completed tasks and testing with **JUnit**, **Postman**, and **ESLint**.

Spring Boot AI Chat API with Ollama [GitHub-Repo]

- A scalable **Spring Boot** application using **Spring AI Ollama** to deliver real-time AI-driven text generation via **REST APIs**, supporting both standard and streaming responses with locally hosted models in a production environment.
- Deployed **locally hosted LLM models** and optimized performance for low latency streaming responses.
- Technologies: **Spring Boot**, **Spring AI**, **Ollama**, **Java 17**, **REST APIs**, **Maven**, **Swagger**, **Postman**, and locally hosted **AI models**.

CERTIFICATIONS [**Verify here**]

- AWS Certified Solutions Architect – Associate
- SAP Cloud Commerce v2 1905 (Hybris)
- Google Data Analytics Professional
- Programming in Java by NPTEL
- Scrum Fundamentals Certified (SFC™)

EDUCATION

- Dakota State University, Madison, SD   Master of Science in Computer Information Systems
- Lakireddy Bali Reddy College of Engineering, India   Bachelors of Tech. in Computer Science and Engineering