

Prathyusha Vanga

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Professional Summary:

- Experienced **Java Full Stack Developer** with expertise in building scalable and high-performance backend applications using **Java, Spring Boot, React.js** and **Microservices**.
- Professional with extensive experience in the **Software Development Life Cycle (SDLC)** and a profound understanding of the analysis, design, development, and implementation of **Java/J2EE** applications.
- An expert in building **event-driven architectures** using **Kafka, Kafka Streams API** for real-time data processing and integration.
- Proficient in building **scalable, maintainable**, and secure **Java-based** applications using **SpringBoot** for backend services.
- Skilled in creating dynamic, responsive user interfaces with **React.js**, ensuring smooth interaction between the front-end and backend systems.
- **Cloud & DevOps** Proficiency with hands-on experience in **AWS, Google Cloud Platform (GCP), Terraform**, and **Docker**, enabling efficient deployment and cloud infrastructure management.
- Hands-on experience with various **GCP** services, including **Compute Engine, Cloud Storage (GCS), Cloud Run** for cloud-based solutions.
- Hands-on experience with **AWS** services like **EC2, S3, Lambda, API Gateway, RDS, DynamoDB, CloudWatch**, and **IAM**, enabling scalable infrastructure, serverless computing, **secure authentication**, and efficient **cloud deployments**.
- Adept at designing, implementing, and optimizing **REST APIs** for seamless communication between microservices and third-party integrations.
- Expertise in using **Terraform** for infrastructure-as-code (**IaC**) to automate the provisioning and management of cloud resources on **GCP** and **AWS**.
- **Microservices Architecture** design and development, ensuring loosely coupled and scalable backend services for financial and eCommerce platforms.
- Strong background in **containerization** technologies (**Docker**) and container orchestration (**Kubernetes, GKE**) to deploy and manage applications at scale.
- Familiar with microservices architecture, enabling the development of modular, scalable applications using **Spring Boot, GCP** and **AWS**.
- Proficient in **CI/CD** pipelines, using tools like **Jenkins, GitHub Actions**, and **Maven** for automating testing, deployment, and continuous integration.
- **Consulting & Technical Leadership**, guiding teams in adopting new technologies, designing scalable architectures, and improving code quality through **test-driven development (TDD)**.
- Well-versed in **Agile methodologies**, participating in sprint planning, stand-ups, & retrospectives, while ensuring the timely delivery of high-quality solutions.
- **Cross-functional Collaboration**, working closely with designers, product managers, and research teams to develop and deliver high-impact software solutions.
- Collaborated in an Agile environment using **pair programming** to improve **code quality**, knowledge sharing, and rapid problem-solving, ensuring efficient development and best practices.
- Developed secure and scalable applications for **banking, fintech**, and **eCommerce** domains, including **financial transactions, order processing, fraud detection**, and compliance with regulatory standards like **PCI-DSS, GDPR** and **data privacy** laws.
- Strong problem-solving skills, consistently identifying and resolving performance bottlenecks, bugs, and inefficiencies in complex systems.
- Dedicated to applying best practices in coding, version control (**Git**), and software development processes to maintain clean, efficient, and readable code.

Technical Skills:

Languages	Java, JavaScript, Python, C, C++, SQL.
Methodologies	Agile, Scrum, Test-Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD).
Database	MySQL, PostgreSQL, DB2, MongoDB, Google Cloud Datastore.
Backend Technologies	Java, Spring, Spring Boot, Python, Flask, Node.js, Microservices
Frontend Technologies	ReactJS, AngularJS, HTML, CSS, JavaScript.
Web services	RESTful APIs, SOAP.
Messaging & Streaming Systems	Kafka, Kafka Streams, MQ, RabbitMQ, Google Pub/Sub, AWS SNS, AWS SQS, and Event-Driven Architecture.
Build & Deploy	Jenkins, Maven, Gradle, Docker, Kubernetes, CI/CD pipelines.
Security & Authentication	OAuth 2.0, SAML, JWT, Spring Security, AWS IAM, API Security.
Development Tools	Eclipse, IntelliJ, Visual Studio, Postman.
Mark-up/XML Technologies	HTML, CSS, XML, JSON, YAML.
Web/App Servers	Tomcat, Apache Tomcat, AWS Lambda, NGINX, Google App Engine.
Testing Framework	Junit, Mockito.
Version Control	Git, Gitlab, GitHub.
OS & Environment	macOs, Linux, Windows, Google Cloud Platform.
Cloud & Infrastructure	EC2, S3, Lambda, API Gateway, CloudWatch, DynamoDB, SQS, SNS, IAM, GCE, GCS, Cloud Functions, Cloud Pub/Sub, Terraform

Professional Experience:

Client: Fifth Third Bank

August 2024 - Present

Role: Java Full Stack Developer

Responsibilities:

- Designed, developed and maintained full-stack financial applications using **Java, Spring Boot, and React.js**, ensuring secure, scalable, and efficient real-time transaction processing.
- Built and deployed **microservices on AWS**, leveraging **EC2, S3, Lambda, and RDS** to ensure high performance, scalability, and cost efficiency for banking and trading platforms.
- Designed and implemented **RESTful APIs**, enabling seamless and secure data exchange between financial systems for **real-time transaction processing** and **financial data synchronization**.
- Worked on both **React and Angular** to develop dynamic, responsive, and user-friendly web interfaces.
- Worked extensively with **PostgreSQL and DynamoDB**, optimizing **query performance, indexing, and partitioning** to handle high volumes of financial data while ensuring **data integrity and security**.
- Ensured applications complied with financial regulatory standards such as **PCI-DSS**, implementing **data encryption, secure authentication, and role-based access control (RBAC)**.
- Contributed to the implementation of **CI/CD pipelines** using **Jenkins, GitHub Actions, and Terraform**, automating **testing, integration, and deployments** for faster software releases.
- Used **Terraform** to manage cloud infrastructure efficiently, automating provisioning and scaling of AWS resources for **cost optimization and enhanced maintainability**.

- Collaborated with security teams to implement industry-standard security controls, including **OWASP security principles, data encryption, and vulnerability management**.
- Leveraged **AWS** services such as **IAM, SQS, SNS, and API Gateway** to build **secure, high-availability, and fault-tolerant** financial applications.
- Optimized financial applications for **high availability and low latency**, implementing **caching mechanisms, and load balancing**.
- Developed and maintained **unit tests (JUnit, Mockito), integration tests, and end-to-end testing** to ensure high application reliability and correctness.
- Partnered with product owners to align software features with business needs, enhancing **user experience** and **operational efficiency**.
- Collaborated in **Agile (Scrum) environments**, working closely with business analysts, DevOps engineers, and security teams to deliver high-quality, **business-driven financial solutions**.
- Implemented **RESTful APIs** to facilitate seamless and secure data exchange between financial systems, ensuring smooth communication for financial transactions.
- Actively participated in code reviews, **sprint planning, retrospectives**, and sprint reviews, ensuring continuous improvement and adherence to best coding practices.
- Engaged in technical discussions about **architecture**, contributing to design decisions and improvements in scalability, performance, and maintainability of enterprise applications.

Client: Thoughtworks

August 2023 – July 2024

Role: Java Full Stack Developer

Responsibilities:

- Developed applications for an eCommerce platform using **Java**, implementing **multithreading** for improved performance and efficient **data handling**.
- Independently designed and developed **scalable Java microservices** using **Spring Boot and Spring Cloud Config**, enabling efficient order request processing.
- Created and maintained **REST API endpoints** for order fulfillment, returns, and cancellations, ensuring seamless transaction processing for the eCommerce platform.
- Designed and implemented ingestion services using **Kafka Streams**, leveraging **Kafka Producer and Consumer APIs** to facilitate real-time data processing with **Google Cloud Storage**.
- Developed and designed interactive web pages for order returns using **React, Angular, and JavaScript**, integrating custom validation controls to enhance user experience.
- Automated **infrastructure provisioning** and resource management using **Terraform**, optimizing deployment efficiency and maintaining infrastructure consistency.
- Designed and implemented **event-driven** architectures, improving system responsiveness, **reducing latency**, and enabling real-time business process automation.
- Collaborated with business and research teams in an **Agile environment**, participating in story grooming, defining performance benchmarks, and ensuring alignment with business objectives.
- Led technical decision-making processes, researching and adopting new technologies to enhance application **scalability, maintainability, and system performance**.
- Adopted **test-driven development (TDD)** methodologies, writing **JUnit** and **Mockito** test cases to ensure **robust software quality, maintainability, and reliability**.
- Contributed to the implementation of **continuous integration and delivery (CI/CD)** pipelines, streamlining the development and deployment lifecycle.
- **Optimized system performance** by analyzing and addressing bottlenecks, ensuring efficient resource **utilization** and maintaining **system reliability**.
- Actively participated in peer **code reviews**, providing constructive feedback and ensuring adherence to coding best practices and design patterns.

- Integrated **backend microservices** with **frontend applications**, ensuring seamless data flow and a cohesive user experience.
- Worked closely with **DevOps** teams to enhance **monitoring, logging, and debugging capabilities**, improving system **observability** and **reducing downtime**.
- Implemented robust **exception handling** and logging mechanisms to improve **fault tolerance** and facilitate issue resolution.
- Engaged in **cross-team collaboration**, aligning development efforts with UX designers, product managers, and quality assurance teams to deliver a well-rounded solution.
- Applied **caching mechanisms** and database optimizations to improve query performance and ensure high availability for eCommerce transactions.
- Maintained comprehensive **documentation for APIs, infrastructure configurations**, and system workflows, ensuring knowledge transfer and seamless onboarding for new developers.
- Engaged in **pair programming** sessions to enhance **code quality**, facilitate knowledge sharing, and improve **problem-solving efficiency** within the team.

Client: Poshmark

November 2021 – July 2023

Role: Full Stack Developer

Responsibilities:

- Developed a **Java-based backend application** capable of processing input images and generating accurate 3D models for visualization.
- Implemented **Python scripts** using **image processing** techniques to extract relevant features and enhance the accuracy of **3D model generation**.
- Designed a user-friendly interface with **Angular.js**, enabling seamless image uploads and interactions for users.
- Developed and integrated **backend REST APIs** to facilitate efficient communication between the **frontend and backend services**.
- Utilized **React.js** to create dynamic and interactive UI components that rendered **data-driven visualizations**.
- Optimized application performance by deploying the **Flask-based image processing** module on **Google Cloud Platform VM instances**.
- Configured **NGINX** as a reverse proxy to enhance server response times and accelerate image processing capabilities.
- Ensured a **responsive and dynamic web application** by implementing real-time updates to reflect changes instantly.
- Conducted **rigorous testing** to validate backend logic, ensuring robust and efficient handling of complex image processing **workflows**.
- Worked in collaboration with **frontend developers** to align **UI functionalities** with backend processing for a seamless experience.
- Authored comprehensive **documentation** outlining application architecture, **API endpoints**, and **deployment strategies**.
- **Debugged and optimized** backend performance, resolving issues related to image parsing, transformation, and model generation.
- Integrated cloud services to enable **scalability** and enhance **computational efficiency** for large-scale image processing.
- Contributed significantly to project success by ensuring the smooth integration of **Java, Python**, and **cloud technologies** to achieve the intended objectives.

Client: Techwave Inc

September 2019 – October 2021

Role: Java Developer

Responsibilities:

- Developed and maintained **full-stack web applications** using **Java, Spring Boot, React, and Angular**, ensuring seamless user experiences.
- Built and deployed **scalable microservices** on **AWS, utilizing EC2, S3, Lambda, and RDS** for efficient cloud-based architecture.
- Designed and implemented **RESTful APIs** to enable secure and smooth communication between frontend and backend services.
- Worked on both **React and Angular** to develop dynamic, responsive, and user-friendly web interfaces.
- Leveraged AWS services for cloud-native application development, including **S3 for storage, RDS for databases, and Lambda for serverless computing**.
- Utilized **Terraform** to automate infrastructure provisioning and deployment on **AWS**.
- Followed **Agile methodologies** and engaged in **pair programming** to improve **code quality**, knowledge sharing, and team collaboration.
- Integrated authentication and authorization mechanisms using AWS Cognito and **Spring Security** to ensure secure access control.
- Optimized application performance by implementing caching strategies and database indexing for high-traffic scenarios.
- Collaborated closely with DevOps teams to streamline **CI/CD pipelines, automating testing** and deployment processes.

Client: Techwave

February 2019 – August 2019

Role: Java Developer Intern

Responsibilities:

- Developed and maintained full-stack applications using **Python (Flask/Django)** for the backend and **React/Angular** for the frontend.
- Designed and implemented **RESTful APIs** to facilitate seamless communication between the frontend and backend services.
- Built scalable and secure backend services on **Google Cloud Platform (GCP)**, leveraging **Compute Engine, Cloud Run, and App Engine**.
- Managed relational databases using **SQL (PostgreSQL/MySQL)**, optimizing queries for efficient **data retrieval and storage**.
- Deployed applications on GCP, utilizing **Cloud Storage** for data handling and **Cloud SQL** for database management.
- Developed **dynamic and responsive web interfaces** using React and Angular, ensuring an enhanced user experience.
- Integrated **authentication and authorization** mechanisms using **Firebase Authentication and OAuth** for secure user access.
- **Automated infrastructure** provisioning using Terraform to deploy cloud resources efficiently on GCP.
- Optimized API performance by implementing **caching mechanisms and database indexing** for high-speed transactions.
- Developed unit and integration tests using **PyTest** to ensure backend reliability and prevent regressions.
- Implemented **WebSockets** for real-time communication, enhancing interactive features in the application.
- Leveraged GCP services like Pub/Sub for event-driven architecture and asynchronous processing.

- Collaborated in Agile teams, actively participating in code reviews, **sprint planning, and continuous integration workflows**.
- Deployed containerized applications using **Docker** and orchestrated them with **Kubernetes** for better **scalability**.
- **Integrated third-party APIs and payment gateways** to enhance application functionality and business logic.

Education:

- **Master of Science in Information Technology | University of Cincinnati | Cincinnati, Ohio.**
- **Bachelor of Technology in Computer Science and Engineering | Rajiv Gandhi University of Knowledge Technologies | India**