

# 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:

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

**February 2019 – October 2021**

**Role: Java Developer**

**Responsibilities:**

- Developed and maintained **full-stack web applications** using **Java, Spring Boot, 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 **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.
- Managed relational databases using **SQL (PostgreSQL/MySQL)**, optimizing queries for efficient **data retrieval and storage**.
- Integrated **authentication and authorization** mechanisms using **Firebase Authentication and OAuth** for secure user access.
- 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 **Web Sockets** for real-time communication, enhancing interactive features in the application.
- 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:**

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- **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**