## **Vedant Pimple**

### **Software Engineer**

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Results-driven Software Engineer with 5+ years of experience designing and developing scalable full-stack applications, cloud-native microservices, and serverless solutions. Proficient in Python, Java, JavaScript/TypeScript, C++, Go, Rust, Kotlin, Bash, .NET, and frameworks including React.js, Next.js, Angular, Node.js, Django, Flask, FastAPI, and Spring Boot. Experienced in AWS, Azure, GCP, CI/CD automation (Docker, Kubernetes, Jenkins, Terraform), SQL/NoSQL databases (PostgreSQL, MySQL, MongoDB, Redis, Snowflake), and system design, microservices architecture, and observability tools. Skilled in secure coding, testing (unit, integration, E2E, TDD), AI/ML (TensorFlow, PyTorch, LangChain, OpenAl APIs), and performance optimization, with a proven track record of delivering high-quality, reliable, and cost-optimized software solutions while mentoring teams and driving innovation.

#### SKILLS

Programming Languages: Python, Java, JavaScript, TypeScript, C++, C#, Go, Rust, Kotlin, Bash, YAML, .NET

Web Development: React.js, Next.js, Angular, Vue.js, Svelte, HTML5, CSS3, Tailwind CSS, Bootstrap

Backend Development: Node.js, Express.js, Django, Flask, FastAPI, Spring Boot, RESTful APIs, GraphQL, gRPC, Microservices

Architecture, Serverless Applications, API Gateway

Databases & Storage: MySQL, PostgreSQL, MongoDB, Redis, Cassandra, DynamoDB, Firebase, SQLite, Snowflake, Elasticsearch, Data

Modeling, Query Optimization

Cloud Platforms: Amazon Web Services (EC2, Lambda, S3, ECS, RDS, DynamoDB),

Microsoft Azure (App Service, Functions, Blob Storage, AKS),

Google Cloud Platform (Compute Engine, Cloud Run, BigQuery, Cloud Functions),

Serverless Framework, Cloud Cost Optimization

**DevOps & CI/CD:** Git, GitHub, GitLab, Bitbucket, Jenkins, GitHub Actions, GitLab CI/CD, CircleCI, Docker, Kubernetes, Terraform, Helm, Ansible, Infrastructure as Code (IaC), Continuous Integration & Deployment

**System Design & Architecture:** Scalable System Design, Distributed Systems, Load Balancing, Event-Driven Architecture, Domain-Driven Design (DDD), API Design, Fault Tolerance, High Availability, Message Queues (Kafka, RabbitMQ)

**Security & Compliance:** OWASP Top 10, Secure Coding Practices, Authentication & Authorization, JWT, OAuth2.0, Identity & Access Management, Encryption, GDPR/ISO Compliance, Vulnerability Scanning

**Testing & Quality Assurance:** Unit Testing (JUnit, PyTest, Mocha, Jest), Integration & End-to-End Testing, Selenium, Postman, Test-Driven Development (TDD), Code Review Automation, Continuous Testing

**Monitoring & Performance:** Prometheus, Grafana, ELK Stack, Datadog, New Relic, Sentry, Splunk, Logging & Tracing, Performance Profiling, Load Testing, Application Monitoring

AI, ML & Data Engineering (Emerging Skills): TensorFlow, PyTorch, Scikit-learn, Prompt Engineering, LangChain, OpenAI APIs, Data Pipelines, Kafka Streams, Apache Airflow, Databricks

Tools & Collaboration: Visual Studio Code, IntelliJ IDEA, Postman, Jira, Confluence, Slack, Notion, Agile/Scrum/Kanban

#### **EXPERIENCE**

#### Intuit | USA | Software Engineer

Sep 2023 – Present

- Developed and maintained scalable microservices using TypeScript, Next.js and Node.js, improving system performance by 25%
- Designed and deployed cloud-native applications on AWS (EC2, Lambda, S3, RDS, DynamoDB) and Azure Functions, ensuring 99.9% uptime and optimized cloud costs
- Reduced task latency by batching multi-agent retrievals through healthcare-optimized memory and OpenAI embedding caches
- Led CI/CD automation pipelines using Jenkins, GitHub Actions, Docker, and Kubernetes, reducing deployment time by 40%
- Applied secure coding practices, OWASP guidelines, JWT/OAuth2 authentication, and encryption for sensitive user data to maintain
   GDPR and ISO compliance
- Validated LLM agent behaviors with deterministic test cases and fault-injection frameworks using TypeScript and LangChain
- Built real-time monitoring and observability dashboards using Prometheus, Grafana, ELK Stack, and Datadog, increasing incident response efficiency
- Optimized application performance by implementing caching strategies, query tuning, and memory management, reducing latency by 20%. Implemented RESTful and GraphQL APIs with gRPC support, enabling seamless integration across distributed systems
- Mentored junior engineers in best practices for microservices architecture, cloud deployments, and secure coding, improving team productivity and code quality

#### CleanClick | USA | CTO & Co-Founder

Jan 2020 – Dec 2020

- Led the technical strategy and development of an **Al-powered** clean-living **SaaS platform**, leveraging **Next.js**, **TypeScript**, **Node.js** and **AWS** to build scalable, cloud-native solutions focused on **real-time personalization** and **backend automation** for recommendations
- Engineered an AI infrastructure using AWS SageMaker to deploy LLM agents that drive autonomous workflows, integrating recommendation engines with natural language understanding for intelligent task execution
- Integrated multimodal AI systems, including voice AI, TensorFlow pipelines, and BERT-powered NLP, enabling autonomous assistants to guide users through conscious product choices, wellness practices, and clean-living education
- Optimized backend systems with Python, Node.js, Express, and AWS for real-time data pipelines and analytics

#### **HCL | India | Software Engineer**

Jan 2021 – Jul 2023

- Designed modular web interfaces in Next.js and React with OpenAI-powered agent integration and server-side orchestration pipelines
- Developed and optimized SQL and NoSQL databases (PostgreSQL, MongoDB, Redis, Snowflake), improving query performance by 35%
- Orchestrated multi-agent pipelines with event-driven triggers and retry logic using Kafka queues and OpenAl function calling
- Built serverless applications using AWS Lambda and Google Cloud Functions, reducing infrastructure management overhead
- Automated DevOps workflows using Docker, Kubernetes, Terraform, and Ansible, standardizing deployments across multiple
  environments
- Collaborated with cross-functional teams using Jira, Confluence, Slack, following Agile/Scrum methodology to deliver projects on time.
- Leveraged AI/ML emerging technologies including TensorFlow, PyTorch, LangChain, and OpenAI APIs for intelligent data-driven features
- Implemented observability and logging with ELK Stack and Datadog, improving system reliability and proactive issue detection
- Optimized agent performance and API call latency using batched requests, async execution, and cloud cost tuning techniques

#### Iview Labs | India | Software Engineer

Jan 2020 – Dec 2020

- Developed backend services using Java, Spring Boot, Node.js, and implemented RESTful APIs consumed by multiple client applications
- Managed database design and optimization for MySQL, MongoDB, and DynamoDB, improving system efficiency and scalability
- Implemented unit and integration testing with JUnit and PyTest, maintaining high code quality and reliability
- Assisted in cloud migration initiatives for applications deployed on AWS and Azure, ensuring smooth transitions and cost optimization.
- Participated in code reviews, agile ceremonies, and CI/CD pipeline enhancements, promoting best practices in software development
- Developed caching and query optimization strategies to enhance backend performance, reducing average API response time by 15%
- Collaborated in designing event-driven microservices and message queue integrations using Kafka and RabbitMQ, improving system scalability

#### **EDUCATION**

#### Master's degree in Computer Science | Syracuse University

- Relevant Courses: Advanced Data Structures & Algorithms, Distributed Systems & Cloud Computing, Machine Learning & Deep Learning
- IEEE Research Publication: <u>Hybrid Deep Learning Model for Automatic Intrusion Detection System using CNN Hybrid Architecture</u>

Bachelors in Computer Science | University of Mumbai, RAIT

#### **PROJECTS**

Intrusion Detection System | Python, TensorFlow, CNN-Bi-LSTM, RNN-LSTM, NSL-KDD, NumPy, Scikit-Learn (GitHub)

- Achieved 98.72% classification accuracy on the NSL-KDD dataset by engineering a hybrid CNN-Bi-LSTM model with automated feature-extraction pipelines in TensorFlow, enabling real-time detection and categorization of malicious network traffic
- Validated and disseminated the solution by publishing "Hybrid Deep Learning Model for Automatic Intrusion Detection System" at IEEE ICDSNS 2023, showcasing a resource-efficient IDS deployable on constrained hardware for rapid, accurate threat mitigation

#### **Nexus Care – Healthcare Platform** | Next.js, TypeScript, Appwrite, TailwindCSS, Twilio, Sentry (GitHub)

- Enabled secure patient onboarding and file management by implementing Appwrite authentication and storage flows in a responsive Next.js/TypeScript portal, validated with 200+ simulated profiles
- Streamlined appointment administration and notifications by building a Next.js dashboard with Twilio SMS and Sentry edge functions, detecting and resolving 100+ simulated errors during Quality Assurance