

Vikas Tiwari

 LinkedIn |  8983084840 |  vikastiwari.xyz |  mailvikastiwari@gmail.com |  Mumbai

Skills

- **Languages:** Python, Go, Java, TypeScript, JavaScript.
- **Backend & Frameworks:** Django, FastAPI, Spring Boot, Micro service development.
- **Frontend:** ReactJS, Redux, Angular.
- **Databases & Messaging:** PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch, Kafka, MSK, Websockets
- **Cloud & DevOps:** AWS (ECS, EKS, S3, Lambda, Cloudfront), Docker, Kubernetes, Colima, Jenkins, Git.
- **Observability:** Grafana, Tempo, Prometheus., Mimir, Loki, Minio.
- **AI & Agent Frameworks:** AWS Bedrock, Strand, Agentcore, AI-based IDEs.
- **Methodologies & Architecture:** Technical Project Leadership, Agile Development, Payment Systems and FinTech Integration, Design Patterns, OOP, Distributed Systems.

Professional Summary

- Language-agnostic, results-oriented Technical Lead with extensive experience in designing and building highly scalable, robust enterprise systems and FinTech solutions.
- Proven Technical Project Leadership in architecting multi-tiered microservices using Python, Go, Java, and event-driven architectures.
- Spearheaded the end-to-end development of complex Payment Systems and FinTech Integrations, specifically comprehensive Lender Management Systems.
- Decisive leader and reliable team builder with high capability to manage cross-functional teams, implement full observability stacks from scratch, and utilize AI-driven development tools to accelerate Agile Development and ensure high-quality software delivery.

Experience

Technical Lead

[Grayquest](#)

Aug/2024 - Present

- **FinTech Integration & LMS Architecture:** Conceptualized and built a comprehensive Lender Management System (LMS) from scratch, supporting multiple loan types, multi-tranche disbursements, demands, and complex ledgers.
- **Technical Project Leadership:** Led a high-performing technical team, driving engineering decisions, product direction, and long-term scalable development processes.
- **Cross-Functional Collaboration:** Coordinated end-to-end Payment Systems and FinTech Integration with the Finance team for the LMS and the Operations team for the Lender platform, while overseeing incident management.
- **Micro service development:** Architected backend infrastructure utilizing Python, FastAPI, Django, and Go Language alongside Design Patterns. Managed data storage and caching with PostgreSQL, MySQL, MongoDB, and Redis.

- **Cloud & Infrastructure:** Directed cloud deployments and container orchestration on AWS using ECS, EKS, Kubernetes, Docker, and Colima. Implemented CI/CD pipelines via Jenkins and event-driven data streaming via Kafka.
- **Observability & Monitoring:** Architected and deployed a full observability stack from scratch utilizing Grafana, Tempo, Prometheus, and Loki.
- **AI & Agentic Engineering:** Engineered intelligent agents using Strand, Agentcore, and AWS Bedrock. Championed a language-agnostic Agile Development process using AI-based IDEs with a strict mandate on unit and integration testing.

Senior Software Engineer

[Turtlemint](#)

Dec/2021 - July/2024

- Led the design and development of multiple enterprise-level microservice applications using the latest technologies of Python, Java, Spring Boot, ReactJS, Redux, Docker and Kubernetes.
- Designed and implemented scalable APIs with rich and thoughtful UI on projects such as Integration Studio, a solution which would help save lots of revenue and will be used for fast paced Insurance Integrations.
- Engineering lead for designing and developing analytical and telemetry dashboard facilitating rich visual summary of critical data points powered by recharts. Used by Product and Engineering Managers in the decision-making process.
- Designed and implemented a chrome extension to record user actions, save them and replay functionality.
- Continuous Integration/Deployment, pull requests, code reviews, load/stress testing, unit/integration testing.

Senior Software Engineer

[Crimson AI](#)

May/2019 - Nov/2021

- Led the development of several products E2E like Trinkai.ai, Authorone.ai GEC Engine, Platform Communication Service and many critical and revenue generating projects.
- Designed the architecture and implementation of microservices like Platform Communication Engine and GEC Engine using Kafka, Sockets, Python, Java, Elasticsearch, AWS Lambda, etc which would handle Millions of requests every day.
- Engineering and Research Owner of the E2E experience of the highly functional and light-weight Chrome, Firefox, Edge Extensions containing complex DOM manipulations, Editor-overlay Tech competing with Grammarly using Angular, Typescript, ManifestV2, Socket, Multi-threading, Redis, etc.
- Integrated multiple third-party systems like iThenticate plagiarism checker, STRIPE payments, Gupshup sms service providers, arxiv repository, open access web api, etc.
- Led the devOps team in establishing a standardized CI/CD platform using Jenkins, Ansible, Nexus, Sonarcube for multiple stage, pre-prod and production environments.
- Migrated production environment to 30+ EC2 instances to achieve scalability and performance heights.
- Introduced and trained team on new tools and technologies to accelerate productivity and growth.

Full Stack Developer

[Codezen](#)

June/2018 - May/2019

- Involved in developing the Traansport portal as their Engineering team using AngularJS, Gulp, Bower, Python, Django, MySQL, Celery, etc
- **Reported directly to CEO:** Designed and implemented company's landing page using Gulp, Bower, Scss, ParticleJs, etc

- Designed and implemented a research website using ReactJS and led the training sessions for new tech.
- Upgrading the system as per the requirement of the client with coordination of the R & D team.

Full Stack Developer

[Alltech India](#)

April/2015 - Oct/2016

- Designed and developed Builder ERP system to track and handle company resources, processing employee payments using .Net MVC framework, MSSQL, IIS, PHP, etc.

Projects

- JSON to JS dynamic code generator : [Turtlemint](#)** **Sept 2023 - Oct 2023**
Tech : Python, Django, OOPS, Pandas, Numpy, gunicorn, Docker, AWS
 A frontend component was creating a deeply nested json which would represent the entire user interaction as a deeply nested json which can contain any value based on the user and the dynamic fields.
 The requirement was to transpile this json into a runnable javascript code. The python service was created to take the JSON as input, use pandas and numpy to leverage an optimized data structure to then perform complicated logic to identify individual components of the deeply nested json and backtrack to create a comprehensive, reliable and testable output which can be executed on any node environment.
 Used gunicorn and Docker to deploy this service on production.
- Trinka AI Socket Backend : [Crimson AI](#)** **Jan 2020 - April 2020**
Tech : Python, Django Channels, Socket, Kafka, WSGI, Docker, AWS
 Created a new python service from the scratch to handle 1 lac records per day as volume using Django Channels Socket implementation. I was responsible to design the architecture and test the capabilities using an idle EC2 instance to load test the capabilities of this new service. This service used kafka to queue up all the records received from the socket and was deployed using WSGI interface and Docker on production.
 Each user was a class object which had responsibilities to handle authentication, pre/post processing of records and cleanup of sockets at the end of connection. Created a complex utility to orchestrate the entirety of the user base and generate real time data from it.
 This was a critical service which served more than 10 thousand users per month, was able to support more than 30 millions of records, was being used by 3 frontend services 3 extensions and many b2b clients as well.
- Trinka AI Socket Frontend : [Crimson AI](#)** **Jan 2020 - April 2020**
Tech : ReactJS, Redux, Socket, NPM, Javascript
 Planned and Developed a new Dashboard and Editor area to open an uploaded document file. Users would upload a document file, frontend would extract sentences from the entire file using an API and a complicated algorithm would maintain the id and metadata of those sentences. These sentences would be queued and sent to the Backend service using sockets and the response would be pushed in redux which would take care of the further process of card creation and meta data processing. Used a lot of core javascript concepts to make rendering as lightweight as possible, even using service workers for component generation based on factory design patterns.

Awards

- **Ace Innovator:** Awarded Ace Innovator for researching and building a new line of products like Chrome, Firefox and Edge extensions in a span of few months. (Crimson AI, Quarter II 2020)
- **Go Getter:** Awarded an award for fast paced and high quality contributions toward projects such as Trinka, AuthorOne, and more within a year. (Crimson AI, 2020)
- **Star Performer:** Awarded to high performing new joiners for achieving more in a small amount of time. (Crimson AI, '19)

Education

BE, Computer Engineering University of Mumbai 2012 - 2018

- CGPI: 6.25, Theem College, Boisar

HSC Vartak College 2010 - 2012

- First Class, Maharashtra Board, Vartak College, Vasai

SSC NGV School 2010

- 87%, Maharashtra Board, NGV School, Virar

Others

- **Mentored Smart India Hackathon College team:** Hackathon Mentor responsible mentoring and advising College team in making a Solution for the Hackathon problem statement (IIT Roorkee, Feb/2019)
- **Certifications:**
 - Google Analytics For Beginners (Oct'17 – Oct'18)
 - Oracle SQL 11g and Oracle PL/SQL (June'17)
 - Java OCPJP and Server Side Programming using JSP – Servlets (Oct'15)
 - Python with Django and Tkinter (Feb'18)
 - Data Analytics using R (March '18)