Shubham Singhal

Full Stack Engineer

✉ shubham21197@gmail.com　📞 0403773769　📍 Sydney, NSW　🔗 https://shubhamsinghal.me

in linkedin.com/in/shubham-singhal-s　○ github.com/shubham-singhal-s

PROFILE

Highly motivated Full Stack Engineer with **over 5 years of experience** in delivering **scalable, modular, and modern applications** across diverse platforms. Holds a **Master's degree in Artificial Intelligence** and is **proficient in full-stack development** with **significant expertise in AI, prompt engineering, and context engineering**. Passionate about **solution design, system architecture**, and **leading complex technical challenges**. Proven ability to write **clean, optimised, and maintainable code** and continuously improve system design

PROFESSIONAL EXPERIENCE

Macquarie Group Limited, Full Stack Developer　　　Feb 2024 – Present | Sydney, Australia

- Delivered key components in a **bank-wide transformation program**, shaping long-term systems architecture and scalability.
- Led a **generative AI initiative** that produced full applications from Jira Stories and Zoom transcripts, proving feasibility and setting foundation for future AI adoption.
- **Designed and specified solutions**, converting complex business requirements into actionable technical specifications in close collaboration with stakeholders.
- **Architected enterprise systems** balancing performance, reliability, and security; modernised load balancer design and integrated a WAF to block malicious traffic and strengthen resilience.
- Built **accessible, modular UI libraries** and delivered responsive interfaces in **Angular and React**, enabling consistent patterns and accelerating frontend delivery.
- Developed **scalable backend APIs and services** with **Spring Boot, Hibernate, and FastAPI**, automating workflows to shorten release cycles.
- Advanced **test automation** (unit, integration, regression) to improve reliability and reduce escaped defects.
- Practised **DevOps delivery** with Docker, Bamboo, AWS, and in-house pipelines, improving deployment automation and CI/CD maturity.

Digital Purpose, Full Stack Engineer　　　Mar 2022 – Jan 2024 | Sydney, Australia

- Delivered **AI-driven client solutions** using **OpenAI, SageMaker, LLMs, and custom AI models**, enabling next-gen product capabilities and differentiating client offerings.
- Produced **solution designs** aligned with business goals by analysing requirements and translating them into technical specifications.
- Built **accessible and responsive frontends** in Angular, React, and React Native to support cross-platform delivery.
- Implemented **scalable backend APIs and services** with Spring Boot and Hibernate, ensuring maintainability and performance.
- Engineered **integrations across Salesforce, Cognito, AWS, and AMS**, streamlining data flows and system interoperability.
- Applied **DevOps practices** to optimise performance and deployments: managed CI/CD pipelines, load tested servers, debugged logs, and leveraged AWS (S3, EC2, CloudFront, SageMaker).
- Strengthened **application quality and stability** through comprehensive testing frameworks (JUnit, Selenium, JMeter, Zephyr).

Amadeus, Full Stack Engineer   Jul 2019 – Jul 2021 | Bangalore, India

- **Architected and designed** a new billing platform, leading the **system blueprint for an API payments overhaul** that modernised financial transaction flows.
- Built an **enterprise customer portal** with Angular and Drupal, engineered to handle **thousands of concurrent users**.
- Contributed to **microservice-based backend API development** using Spring and Hibernate, supporting modular scalability.
- Implemented **API quota management in APIGEE**, enabling usage control, accurate billing, and service governance.
- Conducted **code security audits and remediation**, strengthening application protection against vulnerabilities.
- **Headed three quarterly production releases**, ensuring on-time delivery, quality assurance, and smooth DevOps deployment.
- Maintained **system stability** by resolving production/testing bugs and applying automated testing with Selenium.

SKILLS

Frontend: React, Redux, React Native, Angular, Node, Typescript, SCSS, JS, HTML, CSS

Backend: Spring Boot, Hibernate, SQL, FastAPI, Java, Python, Postgres, MongoDB, SQL

CI/CD: Docker, Bamboo, Git, Cloudflare, S3, EC2, RDS, DynamoDB, DMS and other AWS offerings

Frameworks/Tools: Kafka, Stripe, APIGEE, Salesforce, Wordpress, | Material libraries, integration libraries and various in-house tools

AI (LLMs): Prompt Engineering, Agentic AI, integration with various Large Language Models

AI (Core): Tensorflow, Keras, PyTorch, Scikit-Learn, R

EDUCATION

Master of Artificial Intelligence,   2021 – 2023 | Sydney, NSW
Western Sydney University
Focused on **advanced AI/ML architectures** including **Transformers, GANs, and large-scale image generation models**, applying them in **real-world research and projects**.

Bachelor of Computer Science,   2015 – 2019 | Karnataka, India
Manipal Institute of Technology | Manipal University
Built a strong foundation in **computer science fundamentals, algorithms, and software engineering**, with a **specialisation in Intelligent Systems and code design**.