ARNAV MAHAPATRA

arnav.mahapatra31@gmail.com | +1 (716) 923-5090 | [LinkedIn](#) | [GitHub](#)

*Experienced Full-Stack Engineer with **over 5 years of experience**, specializing in Java and Python with REST API for backend development, complemented by expertise in React and Angular frontends. **AWS Certified Developer Associate** with a proven ability to deliver scalable cloud-based applications.*

EDUCATION

Master's in Engineering Science | August 2022 – January 2024
University at Buffalo, The State University of New York, United States of America

Bachelor of Engineering in Computer Engineering | August 2015 – July 2019
Don Bosco Institute of Technology, Mumbai University, India

PROFESSIONAL EXPERIENCE

Full-Stack Engineer | February 2024 – Present
Vijil.ai, San Francisco, California, United States of America
- Designed and implemented scalable back-end solutions using Java and Python, improving the efficiency of AI-powered cloud services by 40%.
- Developed RESTful APIs in Java and Python, enhancing cross-service communication and enabling faster feature deployment across the platform.
- Led the integration and optimization of Python-based machine learning models, enhancing data processing pipelines and achieving a 25% reduction in latency across AI-powered services.
- Developed and optimized Python scripts for automating data extraction and preprocessing, significantly reducing manual workload and improving overall data accuracy for AI-driven insights.

Software Engineer Intern | May 2023 – January 2024
AI Camp Incorporated, Palo Alto, California, United States of America
- Developed an AI chatbot instructor using LLMs, designed to teach AI concepts and Python, resulting in an interactive and scalable learning experience for users.
- Scraped 100,000+ faculty contacts from over 2,000 high schools across the US utilizing Beautiful Soup, Selenium, and LLMs, boosting company data capabilities and earning a cash prize for project success.
- Leveraged prompt engineering techniques in OpenAI GPT-3.5 Turbo model at $0.0003/contact, integrating Pinecone as a data source for a chatbot with querying capabilities powered by LLM.

Full-Stack Engineer | February 2018 – May 2022
National Stock Exchange IT Limited, Mumbai, Maharashtra, India
- Mastered back-end development in Java, leveraging Spring Boot framework and REST API to construct robust web applications tailored for online examinations, resulting in a 20% increase in system performance.
- Leveraged Python libraries and frameworks focusing on automation, data analysis, and system integration, leading to a 17% increase in efficiency across development processes.
- Designed intuitive, lightweight single-page applications utilizing ReactJS and Angular frameworks with HTML, CSS, JavaScript, and TypeScript, driving a 15% increase in user satisfaction.
- Acquired SQL expertise by managing large databases on PostgreSQL and MongoDB, optimizing CRUD operations and queries, culminating in a 22% improvement in database performance.
- Designed and deployed a robust CI/CD pipeline on AWS infrastructure, incorporating Jenkins, Ansible, and Docker, achieving over 40% reduction in deployment time.

TECHNICAL SKILLS
- **Languages –** Java, Python, SQL, R. | UI - HTML, CSS, JavaScript, TypeScript.
- **Libraries & Frameworks –** Spring Boot, FastAPI, Flask, Django, REST API, GraphQL, Microservices, React, Angular, Node.js, Express.js, Vue.js, LLMs, Apache Kafka, PostgreSQL, Oracle SQL Developer, MongoDB, Hibernate, JPA, JDBC, Elasticsearch, JSP, JSTL, jQuery, Selenium, Redis, JUnit, CI/CD on AWS, Jenkins, Ansible, GitHub Actions, Kubernetes, Docker.
- **Other –** Maven, Git, GitHub, Hugging Face, JIRA, OS (Windows, Linux), Cloud (AWS, GCP).
- **Certifications –** [AWS Certified Developer Associate](#), [AWS Certified Cloud Practitioner](#).

PROJECTS

Remote Proctored Exams | April 2022
- Architected a Remote Proctoring System on the Spring Boot and React frameworks, enabling highly-scalable, reliable and secure online examinations for over 600,000 candidates all over India.

Post-Exam MIS | January 2020
- Developed a Post-Exam MIS portal using FastAPI and Angular, consolidating access to all candidate reports and cutting operational costs by over 25%.