Achintya Sarkar

Software Development Engineer

Available

Delhi, India · github.com/achin1tya · www.linkedin.com/in/achin1tya

SKILLS

Java, Python, TypeScript, JavaScript, SQL, Spring Boot, Spring MVC, Node.js, Angular, React, Handlebars, NLTK, OpenCV, AWS, AWS Lambda, EC2, S3, DynamoDB, SQS, SNS, CloudWatch, Docker, MongoDB, MySQL, PostgreSQL, Microservices, REST APIs, Distributed Systems, Event-Driven Design, System Design, Git, Jenkins, Agile/Scrum, Unit Testing, Code Reviews, Recommendation Systems, NLP, ML Pipeline Integration, Tesseract OCR

ABOUT

- Software Development Engineer with 5+ years of experience designing and shipping scalable backend systems and customer-facing products at Amazon, BBC News, Gaana, and UnitedHealth Group.
- Built high-impact platforms in Java/Spring Boot and AWS
- Integrated ML-driven recommendation systems
- Owned features end-to-end from design to production
- Strong in distributed systems, microservices, REST APIs, and full-stack development
- Currently pursuing MS in Computer Science at Georgia Tech.

EXPERIENCE

Founder & Software Engineer · Self-Employed

Jan 2026 – Present

- Architecting and building a full-stack gym discovery platform offering single-day entry passes for local gyms based on events and casual workout slots.
- Designing backend services in Java/Spring Boot on AWS with a React frontend; implementing payment integration, geolocation-based search, and review aggregation.
- Owning product strategy, system design, deployment, and go-to-market execution end-to-end.

Software Development Engineer · Amazon

Sep 2022 – Jan 2026

- Built and scaled the Diamonds loyalty reward platform in Java/Spring Boot on AWS, serving millions of customers across Amazon India and Mexico.
- Drove a ¹120 increase in average order value in India and enabled deeper customer discounts, contributing to retention and repeat-purchase metrics.
- Integrated a Next Best Action (NBA) ML-powered recommendation engine into the retail page, increasing suggestion clicks by 12% and engagement by 17%.
- Designed event-driven post-order processing pipelines using Python and AWS (Lambda, SQS, DynamoDB) to handle high-throughput reward issuance and reconciliation.
- Led design reviews, mentored junior engineers, and partnered with product and data science teams to define roadmaps and technical requirements.
- Ensured production reliability via on-call rotations, CloudWatch monitoring, and automated alerting.

Software Engineer — Visual Journalism Team · BBC News

Feb 2022 – Sep 2022

- Developed reusable, accessible, and interactive UI components in TypeScript for BBC News websites serving a global audience across 40+ languages.
- Reduced development time for new stories by standardizing component libraries used across the Visual Journalism team.
- Built and maintained Node.js backend services with Handlebars templating, deployed on AWS with code-based deployment pipelines.
- Collaborated with journalists and designers to translate editorial concepts into performant, WCAG-compliant web experiences.

Software Developer · Gaana.com

Jul 2021 – Feb 2022

- Built and maintained Jukebox, a 24x7 offline-capable enterprise music player serving 13,000+ commercial clients including Levi's, Chaayos, and Mochi.
- Engineered offline music caching, license management, and remote playlist sync to ensure uninterrupted playback in low-connectivity retail environments.
- Optimized application performance and resource usage for long-running kiosk deployments.

Software Engineer Associate · UnitedHealth Group (Optum)

Jun 2020 – Jul 2021

- Designed and delivered a server decommissioning automation system using a Java/Spring Boot backend and Angular frontend, adopted across UHG infrastructure.
- Automated validation workflows and infrastructure cleanup, removing unused servers at scale and reducing manual operations overhead.
- Collaborated with infrastructure and security teams to define validation rules and integrate with internal CMDB systems.

PROJECTS

MOOC Course Recommendation System

Python · NLTK · Recommendation Systems · NLP

Built a MOOC course recommendation engine in Python using NLTK to help new learners discover relevant courses based on content similarity and preference matching. Implemented text preprocessing, feature extraction, and similarity scoring to rank courses.

Duplicate PDF Detection System

OpenCV · MongoDB · Tesseract OCR · Computer Vision · NLP

Developed a duplicate document detection system for NSDA using OpenCV, MongoDB, and Tesseract OCR to automate qualification file verification and approval workflows. Implemented OCR-based text extraction and image similarity checks to detect duplicates.