

# Harshit Rohatgi

Tenured AI and software engineer with 15+ years of experience, and technical leader with a proven track record of architecting and delivering highly scalable, business-critical distributed systems across cloud platforms and e-commerce. Expert in tackling ambiguous problem spaces and driving long-term technical strategy, recently pioneering advancements in type systems. Actively exploring and implementing ML strategies to solve complex engineering challenges and drive product innovation.

## Skills

**Programming Languages:** Java, Typescript, Python, C++

**Machine Learning:** Pytorch, Scikit-Learn, Tensorflow, Azure AutoML

**Frameworks:**

**AI Methodologies:** Large Language Models(LLMs), Retrieval Augment Generation(RAG)

**Cloud Platforms:** AWS

**Leadership Skills:** Mentorship, Project Management

## Work Experience and Positions

Sep 2021 - **Microsoft.com, Lead Software Development Engineer**

Current Bengaluru

- Spearheaded the architecture and delivery of a mission-critical Formula Remediation Engine, automating the resolution of Excel formula incompatibilities. This strategic initiative unblocked a key business deliverable, impacting 12k tenants and 2.3 million files monthly, leading a team of 8 engineers to successful execution
- Leading a team of 5 members to improve the reliability of Excel Online product with a focus to bring parity between Excel Online and Excel Desktop under Excel Calc
- Pioneered the application of GenAI workflows to optimize the validation of complex, high-dimensional features within Excel Formulas. Drove innovation by developing a novel test case generation system grounded by the Excel Calc engine, leading to improving the remediation accuracy to 99.9% for the feature.
- Moderating Design Review Panel as an effort to improve design review process in Excel IDC organization

Feb 2020 - **Amazon.com, Senior Software Development Engineer**

Aug 2021 Bengaluru

- Worked as a lead developer for Amazon Sellers organization with a focus on verification for sellers on various Amazon and AWS storefronts.
- Led the development of platform to support Business Process Management over AWS Step Functions.
- Part of the Samurai group providing design consultations for the upcoming project with focus on self-contained web components, data-intensive applications and best practices for building services on AWS.

Apr 2015 - **Amazon Web Services, Software Development Engineer - II**

Feb 2020 Seattle

- Worked as one of the core developers for AWS Marketplace team with projects spanning across the entire pipeline.

- Contributed to rendering platform for the website stack with focus on federated architecture and tooling to support it for the teams.
- Bootstrapped the Experimentation Platform for AWS with AWS Marketplace being the first customer. Implemented the service responsible for vending recognition token based on the request identifiers with focus on low latency architecture(10ms at p95).
- Led the development of Container support for AWS Marketplace as a part of AWS Re:Invent-2018 launch. Further, worked on tooling support for onboarding AWS Services on AWS Marketplace Platform to build their marketplaces using the platform capabilities.

Sep 2011 - **Amazon Webstore, Software Developer Engineer**

Apr 2015 Hyderabad

- Worked on the tooling chain for seller space in Amazon Webstore.
- Architected the new Site Designing platform using independently operable web components and laid the initial design for theme designing and the interaction of the same with seller tools.
- Worked on AutoCategorization for sellers listing in the inventory management tool. Project had a focus on distributed systems with multiple integrations. Addressed the existing pain points of Reliability and Maintainability by developing tooling to give insights into integration points using distributed tracing framework.

June 2010 – **Deloitte India Consulting Pvt. Ltd., Business Technology Analyst**

Sep 2011 Hyderabad

- Worked as an Analyst in Information Management Service Line of Deloitte Consulting. Developed Proof of Concepts for data visualization using Google Maps API.

June 2009 – **Prologix Software Solutions Ltd., Intern**

July 2009 Worked as a developer in the firm as a part of Summer Internship.

## Education

2022- **Masters in Computer Science, University of Texas, Austin**

2025(expected completion)

- Courses taken: Optimization, Machine Learning, Natural Language Processing, Reinforcement Learning, Deep Learning
  - Projects: Predicting Weighted Average Price for Market Makers using Time Series Forecasting Methods
- 2006 - 10 **Bachelor of Technology , Computer Science and Engineering, Vellore Institute of Technology, India, 8.87/10**
- 2005 - 06 **Class 12<sup>th</sup>, AISSE, 88.0%**
- 2003 - 04 **Class 10<sup>th</sup>, AISSCCE, 91.6%**

## Activities and Presentations

**Consultant - GenAI workflows**

- Provided strategic GenAI consulting to startup 'Auxi,' guiding their pivot from traditional rule engines to AI-driven solutions for COGS optimization. Advised on technical architecture and implementation strategies.

**Presentation - Developing services on Native AWS : An introduction**

- Introduced developers to new tooling and paradigms for developing microservices on Native AWS.

## Interests and Hobbies

- Angel Investor
- Endurance cyclist – Randonneur