# Ruturaj Tambe

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#### **EDUCATION**

# New York University Courant School of Mathematics & Stern School of Business *Master of Science in Information Systems*

New York, USA

May 2026

Relevant Coursework: Database Systems, Data Communication Network

# MIT, Savitribai Phule Pune University

India

Bachelor of Engineering in Computer Science and Engineering

Aug 2015 - June 2019

Relevant Coursework: Data Structures & Algorithms, Theory of Computation, Web Technology, Cloud Computing, High Performance Computing

# **SKILLS**

**Programming & Development:** Python, Groovy, Golang, Java, Shell Scripting, SQL, HTML, CSS, JavaScript, Android Development, Web Development

Frameworks & Libraries: Google Apps Script, PassKit API, React, NumPy, Pandas, Matplotlib, scikit-learn Performance Engineering & Optimization: JMeter, Blazemeter, Locust, API/Database Optimization, Query Profiling (Datadog, Splunk, Postgres, Redis, Kafka), Client-side Analysis (Lighthouse, Fiddler, Google Dev-Tools), System Profiling

**Cloud, DevOps & IoT:** Microsoft Azure, AWS, Kubernetes, Docker, YAML, Jenkins, Git, Firebase, IoT Integration, Azure Data Studio

**Project Management & Leadership:** Agile Methodologies, Stakeholder Communication, Cross-functional Team Coordination, Risk Assessment, Project Planning, Resource Allocation, Time Management, Team Mentorship **Collaboration & Communication:** Conflict Resolution, Stakeholder Engagement, Decision Making, Presentation & Reporting, Team Collaboration

**Soft Skills:** Leadership (Mentoring, Resource Planning, Project Management), Strategic Planning, Data-Driven Decision Making, Cost Optimization, Capacity Planning, Google Suite & Microsoft Office Suite (Word, Excel, PowerPoint)

**Business & Analytical Skills:** Strategic Planning, Data-Driven Decision Making, Cost Optimization, Capacity Planning

Arts: Light Art, Sand Art, Ebru, Graffiti, Plays

#### **WORK EXPERIENCE**

## Avaya Software Engineer - Research and Development

CCAAS Analytics Team

Feb 2023 - May 2024

- Spearheaded load emulation, PR regression testing, and reporting for 22 microservices, achieving a 375% improvement in system performance
- Directed capacity planning, resource management, and cost optimization while providing strategic support to the product architect
- Emulated a contact center solution in a pre-production environment using Golang, Python, shell script, and Locust
- Collaborated with lab owners to **save USD 64.2K** through Datadog log management in the first 3-week timeline.
- Performed ETL enhancements, increased customer support to 300 tenants and devised plans for 500
- Debugging issues in the performance labs. Components include:- Avaya products, SIL solution, **Aiven Kafka**, **Datadog**, **Docker**, **Kubernetes**, integration issues, and issues that may hamper the functionality.
- Created and stabilized environments to handle a load of 100k+ chat transactions and 20k+ voice transactions per hour. Devised plans for 500k transactions per hour.
- Proactively identified issues related to CPU, OOM kills, Redis Load, Postgres issues, consumer lag, etc.
- Performed minor bug fixes in the product using Java and Spring Boot.

Awards and Recognition:- Received monetary appreciation for exceptional collaboration and teamwork

Zensoft Services Pvt. Ltd. - Performance Engineer

POC and Performance

July 2019 - Feb 2023

- Team Lead Responsibilities:- Requirement gathering, PI planning meeting, script creation, execution, report analysis, collaborating with dev to resolve bottlenecks, stakeholder presentation (QA/Dev/Infra/Business teams).
- Worked on 20+ small, medium, and complex projects resulting in performance improvements up to 500% in response time and 10x in user concurrency.
- Implemented the "shift right" approach and assessed production data for workload modeling.
- Pipeline creation in ADO with the L3 devops team is to be triggered in sync with deployments.
- Created custom script for multiple certificate logins, dynamic correlation, parameterization, error, and data handling
- Spearheaded resource Training and interviews. Structured KT processes and training content
- Led POCs and converted them to full-fledged projects.
- Worked on a proof of concept (POC) to create and integrate a YAML-based pipeline for BlazeMeter in Azure.
- Conducted capacity planning based on server metrics and user load analysis.
- Possess comprehensive knowledge of end-to-end performance testing processes, including client-side analysis.
- Experienced with protocols such as Web Services and Web-HTTP/HTTPS/SFTP in JMeter.
- Proficient in conducting Baseline Testing, Load Testing, and other testing scenarios using JMeter.
- Adept at test scripting, test scenario creation, test execution, and the reporting and analysis of results.
- Skilled in monitoring resources such as CPU and memory under load, API-level response times for each transaction, microservices-level metrics, and database performance.
- Knowledgeable in Android native app profiling, including memory, CPU, battery or energy, and network profiling.
- Participated in various documentation tasks throughout the project, including creating test plans, workload models, test results, and completion reports.

#### **POC** and Automation

- Completed POC which covered Automation, Git Integration, Pipeline Creation, and Build Automation.
- Created 30+ selenium-based micro scripts and custom actions which were integrated in the company product.

**Awards and Recognition:-** Annual Super Squad award and Spot Appreciation Award:- Received quarterly award for handling multiple challenging projects effectively.

#### **POSITION OF RESPONSIBILITIES**

#### **Cultural Head**

MIT Cultural Art Portfolio | TEDx Light Art | Sand Art

July 2015 - Feb 2019

- As a Cultural Event Head, I participated and **won 15+ awards** in various competitions and explored diverse art forms like light art, sand art, wall painting, graffiti, ebru, speed painting, 3D paper cutting, charcoal
- Contributed to plays as a set designer, art director, actor and back-stage artist. Being a **part of the core team**, I have been a part of **recruitment**, **management decisions**, **finance and resource planning**.

#### Awards and Recognition:-

- Performed light art at TEDx Pune (Oct'16 and Apr'19).
- Won a state-level award for a mime play at "Maunantar".
- Invited as a **VIP guest artist** to perform murals at the prestigious IITB in the Mood Indigo festival, known as **Asia's biggest cultural fest.** December 2018.

#### **INTERNSHIP**

#### Mobile Sutra (INTERN)

CHAT BOT Team

June – July 2018

• The Business case included developing a simple AI chatbot based upon Google API.ai services which would respond to questions and queries asked.

Digital Pass System:

Dec 2024

• Engineered a full-stack digital pass management system using Google Apps Script and PassKit API. Automated coupon generation, integrated digital wallets, and designed a responsive UI for cross-platform compatibility on iOS and Android. (*Tech:Google Apps Script,PassKit API, HTML/CSS,JavaScript*)

# Dynamic User Segmentation System:

Nov 2024

• Designed and implemented an end-to-end database system with normalization, indexing, and clustering. Integrated a K-Means machine learning model to dynamically segment users and built a Python-based full-stack application to apply real-time discounts based on user behavior. (*Tech:Python,MySQL,K-Means*)

# Smart Irrigation System (IEEE Sponsored)

Jan - August 2018

- Led a team of 4 to build a smart irrigation and crop prediction system integrating three modules, viz. hardware back-end (IoT-based back-end), middle-ware (Firebase cloud services), and front-end (An Android app)
- Designed the system to quantify water available to the farmer using the IoT sensors through various sources and provide crop recommendations and a water scheduling system on an Android Social
- I am currently implementing a research-based solar project of 15Kw on the family farm as part of B.E studies.

#### Restaurant Management System

Jan - April 2018

• Developed a three-tier application, where the employees can perform CRUD operations on their profile. The system can help maintain inventory and has a simple billing system to calculate the remaining items.

Group wallet Jan - April 2018

• Designed an app to track payments and later split the total amount among a group of participants.

#### SOCIAL INITIATIVES

- Helpage India. Actively supported elderly individuals through various initiatives and programs
- Adopted a Family in my native village. Provided financial support, job opportunities, connected to government schemes, and enabled interest-free loans.
- Have been a regular blood donor for a thalassemia patient for the past 4 years.
- Helped farmers connect with government schemes.

#### **CO-CURRICULAR ACTIVITIES & LEADERSHIP**

- \* Committee member, MCUG: Contributed to promoting entrepreneurship and innovation.
- \* Orchestrated Texephyr as a core committee member, overseeing hackathons and coding competitions at a national-level event, showcasing leadership and organizational abilities.
- \* Facilitated collaboration: Worked closely with team members and stakeholders.
- \* Enhanced event content: Developed engaging formats to attract diverse participants.
- \* Demonstrated superior written and oral communication skills through active engagement within MCUG and Texephyr committees, facilitating effective coordination and collaboration among members.
- \* Leveraged social media platforms, particularly Instagram, to enhance event promotion and outreach efforts, highlighting adaptability and proficiency with modern communication tools.
- \* Exhibited problem-solving skills and effective time management throughout event planning and execution, ensuring seamless coordination and timely resolution of challenges.