

# Rahul Pavithran

+1 (646) 249 0348 | Jersey City, NJ USA | [rahul.pavi@outlook.com](mailto:rahul.pavi@outlook.com) | [linkedin.com/in/rahul-pavi](https://linkedin.com/in/rahul-pavi) | [alpha2303.github.io](https://alpha2303.github.io)

## Summary

Proactive Software Engineer with over 3 years of professional experience in E2E development of reliant software systems. Experienced in Python and JS/TS full-stack development on AWS and Azure with strong Machine Learning foundations. Recipient of multiple performance awards for high value contributions and optimizations in successful Agile project deliveries.

## Skills

**Programming Languages:** Python, JavaScript / TypeScript, HTML & CSS, Golang, Java, SQL

**Databases:** RDBMS – PostgreSQL, MySQL | NoSQL – MongoDB, AirTable

**Frameworks & Libraries:** uv, Flask, FastAPI, Pydantic, CKAN, SQLAlchemy, pytest, AWS boto3, NumPy, Pandas, Scikit-Learn, Matplotlib, PyTorch, React, Next.js, Express.js, Node.js, sequelize, Tailwind CSS, Spring Boot

**OS & Cloud:** Linux, Docker, Kubernetes | AWS – Elastic Beanstalk, S3, SQS, Lambda, Cloudfront | Azure – Datalake, AKS

**Tools:** CI/CD – GitHub Actions, Azure DevOps | Version Control – GitHub, Gitlab, Bitbucket | Jira, Confluence

## Experience

### New Jersey Institute of Technology

Jan 2024 – May 2024

*Graduate Tutor, Algorithms and Machine Learning*

*Newark, NJ USA*

- Selected as one of five tutors college-wide to aid students in Data Structures, Algorithms, and Machine Learning concepts
- Organized and facilitated online and in-person guidance sessions on ML development, boosting student engagement by 2x

### ValueLabs

Jun 2022 – Jan 2023

*Senior Software Engineer*

*Hyderabad, TG IN*

- Enhanced Adobe Commerce based eCommerce platform via critical full stack optimizations in the order checkout flow, improving customer checkout rates by 17%
- Developed Flask REST APIs and Python automation scripts for AirTable data migration to MongoDB for an AI based insights portal for public sector tenders, saving 6 hours per week of manual migration work
- Received the **ValueLabs Spot Award** in June 2022 for outstanding proactivity and performance in project deliveries

### ValueLabs

Jun 2020 – May 2022

*Software Engineer*

*Hyderabad, TG IN*

- Owned E2E development of Python CKAN data portal on Azure, working with stakeholders to integrate new features and optimize Azure Kubernetes cluster organization, reducing resource costs by 48%
- Engineered regulatory-compliant Solidity smart contracts and blockchain integrations across the stack for Node.js based Security Token Offering (STO) service hosted on AWS, digitally enhancing equity valued over \$5M
- Pioneered NLP based PDF classification and extraction tools in Python, achieving 26% reduction in digitization expenses
- Awarded **ValueLabs Star of the Month** Award in March 2022 and **Superstar of the Quarter** Awards in January 2022 and December 2020 for exceptional project contributions and ownership initiatives

## Projects

Gaussian Galleria | Next.js, React, TypeScript, Tailwind CSS, PostgreSQL, AWS

- Collaborated on management service development for ML-based 3D scene reconstructions, hosted on Vercel with AWS S3 and Neon PostgreSQL for data storage

Dockerized DeepSeek | Python, uv, vLLM, FastAPI, Pydantic, Docker

- Constructed a Docker based API service of distilled Deepseek R1 LLM model, providing self-hosted GenAI capabilities

mlinstruct | Python, NumPy, Matplotlib, Scikit-learn, PyTorch

- Crafted Python module to manage ML model training instances and evaluation plot generation with workflow features including early stopping and model checkpoints, reducing project asset management and execution efforts by 58%

## Education

**Master of Science, Computer Science**

Jan 2023 – May 2024

*New Jersey Institute of Technology (GPA: 4.00 / 4.00)*

*Newark, NJ USA*

**Relevant Coursework:** Data Structures and Algorithms | Database Management System Design | Machine Learning | Artificial Intelligence | Internet and Higher-Layer Protocols | Operating System Design | Cloud Computing | Applied Statistics

**Bachelor of Technology, Computer Science and Engineering**

Aug 2016 – Jun 2020

*Anurag Group of Institutions (CGPA: 9.46 / 10.00)*

*Hyderabad, TG IN*