

# RAHUL PAVITHRAN

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## EXPERIENCE

### ValueLabs Solutions LLP | Hyderabad, India

#### Senior Software Engineer

Jun 2022 – Jan 2023

- Bolstered engineering of critical fixes across the stack for cloud-based PHP/Magento2 E-commerce website of prominent dessert brand
- Composed REST APIs and data migration scripts for tender aggregator portal on AWS, automating data transfer from AirTable to MongoDB with 35% better efficiency

#### Software Engineer

Jun 2020 – Jun 2022

- Commanded Python CKAN based data portal development on Azure (AKS, DevOps), integrating diverse data sources and APIs, achieving 50% resource reduction
- Coordinated creation of Solidity Smart Contract, Express REST APIs and CLI tool for Blockchain token offering, doubling token control accessibility
- Utilized Tesseract with custom fine-tuned LSTM model to deliver Python based document processing solutions, reducing digitization time by 20%
- Awards:** ValueLabs Star of the Month - Mar 2022 | ValueLabs Superstar of the Quarter - Jan 2022 | ValueLabs Superstar of the Quarter - Dec 2020

#### Intern

Dec 2019 – Mar 2020

- Implemented unit tests through xUnit framework for new features of ASP.NET MVC project, maintaining >80% coverage and reducing development load

### SmartBridge Educational Services Pvt. Ltd | Hyderabad, India

#### Machine Learning Intern

Mar 2019 – Jun 2019

- Mentored over 200 students on fundamentals of Machine Learning and Exploratory Data Analysis utilizing Python frameworks

## EDUCATION

### Master of Science, Computer Science

Jan 2023 – May 2024

#### New Jersey Institute of Technology | Newark, NJ

- GPA** 4.00 / 4.00
- Relevant Coursework:** Data Structures and Algorithms | Database Management System Design | Image Processing and Analysis | Machine Learning | Artificial Intelligence | Operating System Design | Cloud Computing | Applied Statistics

### Bachelor of Technology, Computer Science and Engineering

Aug 2016 – Jun 2020

#### Anurag Group of Institutions | Hyderabad, India

- CGPA** 9.46 / 10.00

## SKILLS

- Programming Languages:** Python (>10000 lines) | JavaScript | Rust | C# | C++ | Solidity | PHP | SQL | Go
- Frameworks and Libraries:** Flask | CKAN | Numpy | Pandas | Matplotlib | scikit-learn | PyTorch | Angular | SolidJS
- Cloud Services and Tools:** Amazon Web Services | S3 | Lambda | EC2 | API Gateway | Elastic Beanstalk | Microsoft Azure | Azure DevOps | Azure Datalake | Azure Kubernetes Service | Git | GitHub | GitLab | Docker | Linux | JIRA
- Storage and Databases:** PostgreSQL | MySQL | MongoDB | S3 | Azure SQL | AirTable

## ACADEMIC PROJECTS

### SEP Event Prediction using LSTM-based Time-Series Modelling

Jan 2024 – May 2024

#### New Jersey Institute of Technology | Newark, NJ

- Formulated multiple LSTM based approaches in PyTorch to predict solar energetic particle (SEP) events based on time-series dataset with heavy class imbalance

### Real-time Traffic Detection

Jun 2023 – Dec 2023

#### New Jersey Institute of Technology | Newark, NJ

- Proposed and analyzed the use of YOLOv5 and YOLOv8 neural network models for complex traffic detection with >80% accuracy
- Presented paper at 2024 IEEE International Conference on Advanced Systems and Emergent Technologies (IC\_ASET 2024)

## CAMPUS ACTIVITIES

### Graduate Tutor

Jan 2024 – May 2024

#### NJIT Ying Wu College of Computing | Newark, NJ

- Aided in academic support to students pursuing courses in Algorithms and Machine Learning, increasing engagement by 30%

### Office Assistant

Sep 2023 – May 2024

#### NJIT Department of Residence Life | Newark, NJ

- Improved resident feedback and handled 4-5 emergency scenarios and while handling administrative duties, package distribution and resident concerns