

# Akhilesh Babu Tumati

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## EXPERIENCE

### • Tata Consultancy Services (TCS)

August 2023 – August 2024

Software Engineer

Hyderabad, India

- Deployed Jenkins CI/CD pipelines under the UPS client, reducing deployment time by 40% and minimizing deployment errors by 30%.
- Managed CouchBase DB, a NoSQL cloud database, optimizing data storage and retrieval processes by 25%, leading to a 15% improvement in application performance.
- Monitored/Tracking servers and applications performance using DynaTrace and Grafana, resulting in a 20% reduction in system downtime and improving application response time by 10%.

### • Honeywell Solutions Technology Lab, Hyderabad

January 2023 – June 2023

Software Developer

Hyderabad, India

- Developed automation scripts using Katalon, reducing testing time by 30% and improving test coverage by 25%.
- Implemented front-end improvements in enterprise applications using JavaScript and Angular, leading to a 15% increase in user satisfaction and reducing page load times by 20% while implementing Coverity and Blackduck for code analysis, resulting in a 40% increase in code quality and security. Utilized Dynatrace for application monitoring, leading to a 35% improvement in system performance and a 20% reduction in unplanned downtime.

## EDUCATION

### • Virginia Tech

August 2024 – Current

Master of Engineering in Computer Science

Blacksburg, VA, USA

- GPA: 4.00/4.00

### • Vellore Institute of Technology

June 2019 – July 2023

Bachelor of Technology in Computer Science and Engineering

Amaravati, India

- GPA: 8.40/10.00

## SKILLS

### • Programming Languages: Java, JavaScript, Python

### • Software Development & Testing: JavaScript, TypeScript, React, Node.js, Spring Framework, Spring Boot, Figma, MySQL, CouchBase, MongoDB, Jenkins CI/CD pipelines, Bamboo, BitBucket, Git, Confluence, TFS, AWS (EC2, VPC, EKS, Lambda), Katalon, Jira, DynaTrace, Grafana, Coverity

### • Data Science & AI/ML: NumPy, Pandas, Matplotlib, TensorFlow, SK-Learn, Hugging Face, PyTorch

## ACADEMIC PROJECTS

### • Crypto Currency Value Prediction:

September 2021 - November 2021

Tools: [Google colab, Python, SkLearn, Numpy, Pandas]

- Utilized ARIMA and SARIMA for time series prediction of cryptocurrency values, achieving a prediction accuracy of 85%.

### • Mahabharat Character Detection:

August 2022 - December 2022

Tools: [Google colab, RoboFlow, Python, Pytorch, Tensorflow]

- Developed a multi-character detection system using state-of-the-art architectures like ResNet-50, VGG-19, ViT (Vision Transformers), and YOLOv5, improving detection accuracy by 30% compared to traditional methods.

### • Creating Private Cloud Storage:

May 2021 - July 2021

Tools: [Raspberry Pi, NextCloud]

- Built a private cloud network using Raspberry Pi and NextCloud API, increasing data accessibility by 50% and reducing reliance on third-party Basic cloud services.

### • Human Height Prediction:

September 2021 - November 2021

Tools: [Google Colab, Roboflow, python, Pytorch]

- Applying image segmentation on data using Mask-RCNN, then categorizing the data points based on the masked instances, and for better competency detection and PyTorch libraries are used.

## PUBLICATIONS

- [C.1] Akhilesh Babu Tumati, et al. (2023). **Face Invariant Classification and Detection of Mythology Characters Using Custom Dataset (ClaDeMuC-CD)**. In *2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT)*, IEEE. 05-06 January 2023, Bhilai, India. DOI: 10.1109/ICAECT57570.2023.10118094

## CERTIFICATIONS

### • AWS Cloud Practitioner

August 2021