Jayanth Vunnam

Boulder, CO | jayanthvunnam7@gmail.com | +1 720-291-0884 | linkedin.com/in/jayanth-vunnam | GitHub | Portfolio **Education**

University of Colorado at Boulder

Master of Science in Computer Science, GPA: 3.5/4.0

August 2024 – May 2026 Colorado, United States

August 2018 – June 2022

Chaitanya Bharathi Institute of Technology

Bachelor of Engineering in Computer Science and Engineering. GPA: 8.45/10

Hyderabad, India

Coursework: DBMS(Databases), Object Oriented Programming, Analysis of Algorithms, Computer Networks, Operating Systems, Computer Vision, Machine Learning, Neural Networks and Deep Learning, Software Engineering.

Skills

Languages: Python, JavaScript, TypeScript, HTML, CSS, SQL, C, C++.

Technologies: Node.js, Express.js, AWS Lambda, AWS DynamoDB, AWS CloudWatch, AWS S3, Reactjs, MS Office, MySQL, MongoDB, Postman, Splunk, New Relic, Logging, Troubleshooting, Jest, CI/CD, Jenkins, Linux, REST API, Git, GitHub, JIRA, Confluence, BitBucket, Django, TensorFlow, Keras, PyTorch, Scikit-Learn, OpenCV, NumPy, Pandas, Software Development.

Work Experience

Advance Auto Parts

Hyderabad, India

Associate Software Developer

July 2022 - August 2024

- Contributed to the development of an e-commerce website and mobile app back-end and implemented **REST APIs** using **Node.js**, **Express.js**, **TypeScript**, **JavaScript**, **and AWS** enhancing functionality and user experience.
- Optimized backend performance with AWS Lambda and DynamoDB, AWS S3, reducing API response time by 30%.
- Configured 45+ automated alerts in **New Relic and AWS CloudWatch** for real-time anomaly detection, reducing incident response time by 50%.
- Played a key role in website maintenance by troubleshooting issues using **Splunk** and collaborating with cross-functional teams in an Agile environment to deliver performance enhancements, improving system reliability by 25%.
- Developed end-to-end test cases using **Jest** through Test-Driven Development (TDD) ensuring code robustness and increasing test coverage from 60% to 85%.

GE Appliances

Hyderabad, India

Digital Technology Intern

January 2022 – July 2022

- Enhanced Brilliant Factory Application, which tracks manufacturing plant operations, detects issues in real time, and monitors employees located at Louisville, Kentuky.
- Implemented new features and optimized code using HTML, CSS, and JavaScript, reducing data latency from 5-7s to 2s.
- Conducted an in-depth analysis of 5+ RPA tools and selected **UI Path** to automate the testing process for the Brilliant Factory suite, reducing the manual testing time by **30**%.

Accomplishments

Recognized with the 'Silver Medal' for Academic Excellence at CBIT Institute Day, 2018.

Projects

Lip to Speech Synthesis

- Built a DL model with CNN, AlexNet, and LSTM to generate speech and text from videos, achieving an accuracy of 80%.
- Improved accuracy by training on 1,500 video clips to detect lip movements and validating on muted videos.

Pneumonia Prediction using X-rays

• Designed a diagnostic deep learning model from scratch on a vast medical dataset of around 8000 images and utilized pre-existing models such as VGG19 and ResNet-50, achieving accuracy of 95%.

Covid-19 New Case Prediction and Recovery Rate across the World and India

- Engineered a predictive model to forecast COVID-19 cases, recoveries and deaths worldwide and at the state level in India for the next 10 days, achieving 98% accuracy, utilizing Python, TensorFlow, and ML models like polynomial regression and SVMs.
- Integrated real-time data retrieval from the Johns Hopkins website through API to improve accuracy by 25%.

Crime Grievance Cell

• Created an application with **HTML**, **CSS**, **JavaScript**, **Python**, **and Django** that enables online crime reporting, complaint tracking, and criminal record management 24/7, improving accessibility and efficiency for the public and authorities.