Jayanth Vunnam

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Education

University of Colorado at Boulder August 2024 – May 2026
Master of Science in Computer Science, GPA: 3.5/4.0 Colorado, United States

Chaitanya Bharathi Institute of Technology August 2018 – June 2022
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

Programming: Python, JavaScript, TypeScript, HTML, CSS, C, C++, Java, SQL.

Technologies: Node.js, Express.js, React.js, Django, REST API, MongoDB, MySQL, AWS (Lambda, S3, DynamoDB, CloudWatch), Docker, Kubernetes, CI/CD, Splunk, New Relic, Logging, Troubleshooting, Jest, CI/CD, Linux, Django, PL/SQL, NoSQL, OOP, Software Development.

Tools: Git, GitHub, Jira, Jenkins, Visual Studio, Postman, MS Office.
Machine Learning: PyTorch, TensorFlow, Keras, Scikit-Learn, OpenCV, NumPy, Pandas, Matplotlib.

Work Experience

Advance Auto Parts Hyderabad, India
Associate Software Developer July 2022 – August 2024

- Designed and developed e-commerce website front-end using **React** and mobile app back-end, architected and deployed **REST APIs** using **Node.js, Express.js, TypeScript, JavaScript, and AWS** enhancing functionality and user experience.
- Optimized back-end performance using **AWS Lambda** and **DynamoDB** to handle millions of requests efficiently, reducing API response time by 30% using caching and load balancing techniques.
- Configured 45+ automated alerts in **New Relic and AWS CloudWatch** for real-time anomaly detection, reducing incident response time by 50%.
- Managed website maintenance activities using **Splunk** to identify and fix issues, working with cross-functional teams in an Agile environment, and boosting system reliability by 25%.
- Authored 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, Kentucky.
- Implemented new features and optimized code using **HTML, CSS and JavaScript**, reducing data latency from 5-7 to 2 s.
- Researched RPA tools and ML-driven automation frameworks, selecting **UI Path**, reducing manual testing by 30%, and improving the test execution time.

Accomplishments

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

Projects

Food Delivery App:
- Built a food delivery app with **React** (frontend), **Node.js, Express, MongoDB** (backend) and JWT + bcrypt for authentication and user can place and review the orders. Made an admin panel to manage 100+ food items in the database and integrated **Stripe** for payment processing.

Lip to Speech Synthesis
- Built a 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.

Crime Grievance Cell
- Created an application with **HTML, CSS, JavaScript, Python, and Django, postgresql** that enables online crime reporting, complaint tracking for logged-in users, and criminal record management 24/7, improving accessibility.

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%.