

VAMSI UDAYAKUMAR JONNAKUTI

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EDUCATION

New York University, Tandon School of Engineering

Brooklyn, NY

Master of Science in Computer Engineering

Expected May 2026

- **Courses:** Machine Learning, Deep learning, Computer System Architecture, Big Data, MLOps

PES University

Bangalore, India

Bachelor of Technology in Computer Science and Engineering

Aug 2015 – May 2019

- **Courses:** Data Structures, Algorithms, Data Analytics, Cloud Computing, Data Base Management Systems, Operating systems, Network Security.

TECHNICAL SKILLS

Java, Python, C, C++, JavaScript, Groovy, JSON, XML, Typescript, SQL, HTML/CSS, PHP, Vela, REST API, Spring boot, Gradle, Kubernetes, Junit, Mockito, Selenium, OpenCV, Node JS, React JS, Spark, Docker, Maven, Linux, MongoDB, Postman, Elastic Search, Postgres, NoSQL, MySQL, Kafka, Jenkins, Django

EXPERIENCE

Target Corporation

Bangalore, India

Senior Engineer

Aug 2022 – Aug 2024

- Led the transition of the in-house low-code automation tools to a single no-code platform by designing and developing the entire back-end using Postgres for the database, Java, and Spring for the microservices; gaining over 500 users and saving 65,000 man-hours/year.
- Spearheaded the creative automation capabilities using OCR & ML to extract design components along with the relative positioning to render package designs on Illustrator using Java & ActiveX, reducing the workload by 80%.
- Built a record and play feature that captures user interactions on websites during manual process execution and automatically generates automation scripts, reducing web-based automation development time by 95%.
- Trained and mentored TMs in Java, Spring Boot, Vela, Docker, and other related technologies, guiding them through automation projects to strengthen their understanding of the Tech Stack, SDLC and the CI/CD pipeline.

Engineer

Dec 2019 – Aug 2022

- Developed five robust, scalable bots using Selenium and Java to automate key business processes and save over \$500,000 annually while reducing labor hours by 2,000 across two distinct business units.
- Built a manual intervention capability on the monitoring dashboard using ReactJS and Redux on which helps users update data and change the processing state in real-time to reduce failure scenarios by 75%.

Philips Healthcare R&D

Bangalore, India

Full Stack Software Development Intern

Jan 2019 – Jul 2019

- Designed an end-to-end web application that enables doctors to remotely monitor treatment given to a patient using AngularJS & Redux.
- Developed a hospital appointment manager app for Windows using WPF for the front end and .NET C# for the back end, interacting with DB in SQL Server via stored procedures.

PROJECTS

Intelligent Intrusion Detection System (Network security, ML) | NumPy, PyTorch, Keras, Python, Tensorflow

- An IDS that is powered by ML using a CNN-LSTM trained anomaly IDS and decision tree based signature IDS, combined to work as a two-staged filtration system to detect malicious network packets with a MCC score of 0.84

Real-time Sentiment Analysis for CT'17 (Text classification, Data analysis, NLP) | Pentaho, Python, Tweepy

- Implemented a real-time sentiment analysis system that scrapes the twitter data during the match and then uses NLP and text classification techniques to perform analysis on Pentaho.

License Plate Recognition System (Computer vision, Machine learning) | OpenCV, PIL, Python, Tesseract

- Revamped the LPR system by implementing a hybrid architecture that localized on non-compliant license plates, using edge detection, combined with OCR to achieve 92% accuracy in extraction at a 2x faster rate.