VRUSHIT JAYESH PATEL

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OBJECTIVE

A Software Engineer with over 3 years of experience in developing scalable automation pipelines and systems integration. Now pivoting into AI and Deep Learning to develop neural network models for real-world applications.

EDUCATION

NMIMS University, Mukesh Patel School of Technology Management & Engineering, Mumbai Jul 2018 - May 2022

Bachelor of Technology in Computer Engineering CGPA: 3.78/4.00

SVKM's Chatrabhuj Narsee Memorial School, Mumbai Indian School Certificate Examination (ISC Board)

Secured Full Marks in Computer Science (100/100)

Jun 2016 - May 2018

90.25%

PROFESSIONAL EXPERIENCE

Client Services Consultant I, VMware Cloud Foundation (VCF) VMware Software India Pvt. Ltd. by Broadcom, Mumbai, India

Jul 2022 - Jun 2025

- Joined VMware as an Associate Consultant before Broadcom's acquisition while maintaining the core responsibilities of optimizing system performance by developing technical solutions, automating workflows, and customizing products using TypeScript, JavaScript & Python.
- Developing automation and cloud infrastructure projects, focusing on VMware vRealize Suite and VMware Cloud Foundation, streamlining operations, and delivering scalable solutions for global clients.
- Automated repetitive configuration steps for a Leading IT Consulting Firm in the USA by using vRO workflows
 and scripts in TypeScript, reducing manual effort by 1 hour per release. Also, process efficiency and reliability
 were improved by reducing vulnerabilities by 80%.
- Led deployment sessions for a Reputable IT Services Firm (Taiwan), automating the NAT rule management using VMware NSX API calls and integrating it into the vRealize Automation Service Broker, reducing product switching by 80% and ensuring 100% client satisfaction.
- Designed a scalable multi-machine blueprint for a Government-Owned Telecommunications Provider in India
 using VMware vRealize Automation. The blueprint supported dynamic provisioning of up to 200 VMs,
 providing multiple network options, custom storage allocation, security groups, & load balancers.

Remote Web Developer [Part-time]

Jun 2021 - Dec 2021

Aepiphanni Business Consulting, Georgia, United States

- Designed, developed, and hosted professional websites for 5 international clients using WordPress, gaining hands-on expertise with plugin development and exposure to various web development approaches.
- Managed the entire website development process, from layout design to functional implementation, maintaining optimal performance across all devices and screen sizes, resulting in a 40% boost in mobile usability scores.

OpenCV Software Intern

Apr 2021 - Jun 2021

Software Workshop Technologies Pvt. Ltd, Mumbai, India

- Developed a real-time person-tracking software using OpenCV and machine learning algorithms that reduced missed entries in security monitoring by 60% and increased overall operational accuracy.
- Utilized YOLO v3 for real-time object detection, the Centroid Tracking Algorithm, and Python libraries such as OpenCV and PIL to ensure precise human tracking, achieving seamless monitoring even in dynamic environments.
- Engineered an algorithm to assign unique IDs to individuals and created an automated reporting system to log activity entries in Excel, saving manual effort and enhancing report efficiency.

ACADEMIC PROJECTS

IoT in Unmanned Ground Vehicles | Python, OpenCV, C++ |

Jun 2021 - Mar 2022

- Designed and built a semi-automated IoT-based Unmanned Ground Vehicle using Arduino Uno & Raspberry Pi to analyze & store environmental data alongside a live video feed while keeping production costs to \$100.
- Implemented algorithms for object detection, avoidance, and connectivity, yielding around 98% accuracy when running at 30-40 FPS. Sensors and components were integrated, including a Raspberry Pi Camera for

live video, Ultrasonic sensors, a GPS module, and environmental sensors (Air Quality, Temperature, Humidity) for real-time data collection on the custom-designed 3D-printed chassis.

- Developed a real-time web application controller that uses Google Firebase as its cloud database and offers an easy-to-use interface for displaying sensor data such as humidity, road quality, and air quality.
- Authored a research paper (unpublished) on IoT in Unmanned Ground Vehicles during the final year project.
- Recognition: Participated in the Final Year "Project Competition" with this project, representing the computer engineering batch.

Bar Stock Exchange Dine-in Ordering Web-Application | Django, Python, JavaScript | Jan 2021 - Apr 2021

- Developed a stock market-themed dine-in ordering web application using Django and integrated it with an automated chatbot to give customers a unique and interactive experience.
- Engineered asynchronous dynamic features with JavaScript, jQuery, and AJAX to reduce page load times by 70% and improve responsiveness.
- Applied Agile methodology to complete the project within 6 sprints and successfully implemented over 10 core features while developing a comprehensive database architecture, which included a detailed ER diagram, schema, and extensive documentation on functionality, design, and user constraints.

Level 2 Self-Driving In GTA V | Python, OpenCV, Machine Learning |

Aug 2020 - Oct 2020

- Pioneered a real-time object and lane detection project, using Machine Learning and Image Processing
 algorithms to develop a self-driving simulation script on the GTA V gaming environment to emulate
 real-world conditions and in a live simulation, achieving 72% detection accuracy at 5 frames per second,
 demonstrating the potential of applying machine learning for autonomous vehicle scenarios.
- Engineered a Python-based script that combined the YOLO (You Only Look Once) neural network algorithm for object detection with the Hough Transform Algorithm for lane detection, performing full-frame scans to identify lanes, vehicles, pedestrians, traffic signals, and other objects.

Medbay Website | jQuery, JavaScript, PHP |

Sept 2020 - Oct 2020

• Developed a PHP-based medical search platform that allows users to find doctors and hospitals based on their proximity and specialty. Integrated dynamic data loading using AJAX and real-time blog functionality for doctors, utilizing a wide range of JavaScript features to enhance user experience.

CERTIFICATIONS

•	VMware Certified Professional - Cloud Management and Automation VMware Mumbai	Dec 2024
•	VCF Bootcamp VMware Mumbai	Feb 2024
•	Certified Web Development Bootcamp on MERN Stack Udemy Mumbai	May 2023
•	Python Data Structures Certification University of Michigan	Jul 2020
•	The Arduino Platform and C Programming Certification University of California, Irvine	Feb 2019

TECHNICAL SKILLS

- **Programming Languages & Tools:** Python (NumPy, Pandas, Scikit-learn, NLTK, OpenCV), Java, C++, TypeScript, JavaScript, SQL, PHP, Shell scripting, Postman, Arduino, Git, JIRA, WebSockets
- Frameworks & Libraries: Django Framework, MERN Stack (MongoDB, Express.js, React, Node.js), TensorFlow,
 jQuery, Selenium
- Databases: MySQL, MSSQL, PostgreSQL, SQLite, MongoDB, Google's Firebase Realtime Database
- DevOps & Cloud Technologies: VMware vRealize Suite, VMware Cloud Foundation, Terraform, Docker, Kubernetes, CI/CD Pipelines, GCP, Ansible

ACHIEVEMENTS AND EXTRACURRICULAR ACTIVITIES

- Invited as a Judge for Flash Coding 2022, organized during the MPSTME Tagneeq Fest in February 2022.
- Led the Technical Department in developing and maintaining the website for NMIMS's Annual Festival Social Conclave 2022, resulting in a 40% increase in sponsors and increasing interaction with 3000+ participants.
- Recognized as an '<u>Infosys Certified Software Programmer</u>', demonstrating industry readiness and problem-solving skills, being one of only 7 students shortlisted from the entire batch in **April 2021.**
- Finished as the 1st Runner-Up at the 'Hack-n-Code 4.0' Hackathon (<u>Cash prize of Rs. 7,000</u>) for developing a climate change education website with API calls and an interactive chatbot, **MPSTME**, **Mumbai**, **March 2021**.
- Mentored more than 250 students as a part of the ACM Committee during the pandemic to encourage them to learn Python, **MPSTME**, **Mumbai**, **Aug 2020**.