

Harsh P V

+91 9884922091 | harsh.pv07@gmail.com | <https://www.linkedin.com/in/harsh-pv-988b66146/> |
<https://github.com/harshpv07> | <https://harshpv07.github.io/PortfolioNew/> |

TECHNICAL SKILLS

C++, Python, SQL (Postgres), JavaScript, HTML/CSS, NodeJS, Network Protocols, TCP/IP stack, Terraform, Ansible, Django, Flask, Pandas, Keras, PyTorch, Docker, ReactJS, MongoDB, AWS, Languages - English, Hindi, Tamil, Malayalam

EDUCATION

University of Illinois Urbana Champaign

Masters in Computer Science

Champaign, IL

Jan. 2024 – Jul 2025

Vellore Institute of Technology

Bachelor of Technology in Computer Science (3.66 GPA)

Chennai, India

Aug. 2017 – May 2021

EXPERIENCE

Solutions Engineer

Cisco Systems

June 2021 – Dec 2023

Mumbai, India

- Designed and implemented an advanced configuration translation engine for Cisco Catalyst and ISR devices. Achieved a remarkable 15 percent increase in customer adoption of Cisco products.
- Developed API gateways for Cisco secure solutions and 3rd party ITSM tools which improved user satisfaction and better cross-platform integrations.
- Automated network deployments using automation platforms such as Terraform and Ansible which reduced network deployment times by 90 percent.
- Exhibited strong stakeholder management and knowledge in networking protocols, cloud security, and firewalls.

Software Engineering Intern

Novartis AG

Jan. 2021 – July 2021

Hyderabad, India

- Developed org-wide KPI dashboards using React, ChartJS and Django and created data pipelines from several ITSM systems (JIRA / ServiceNow / Excel) using Snowflake.
- Incorporated machine learning-powered benchmarking service into the KPI dashboard, resulting in a remarkable 40 percent reduction in cycle times."
- Designed and implemented 40 KPIs spread across 5 domains (Scrum, DevOps, QA, Testing, Customer satisfaction, Employee satisfaction) based on project metrics/data availability from internal ITSM tools.

NLP Engineering Intern

Siam Computing

May 2019 – Aug 2019

Chennai, India

- Responsible for building and modeling a customer centric chatbot using RASA X
- Developed a smart chatbot assistant that consists of multiple dialog routes for various functions like recruitment, sales, etc which reduced contact center interactions by 38 percent.
- Developed a smart attendance system that uses the facial encodings to recognize facial features and automatically mark attendance. Deployed the entire prototype locally on a Raspberry Pi with Django, ReactJS, and MongoDB.

Research Assistant

Vellore Institute of Technology

Mar. 2019 – Jan 2021

Chennai, India

- Developed Image captioning solutions for surveillance applications using deep-learning techniques like CNN, and LSTM.
- Further improved the accuracy of the model by using image augmentation techniques such as RotNet, rotation-invariant CNN, etc for CCTV application.
- This research has been published as "Captioning for motion detection for video surveillance applications using deep learning" (IJITEE)**

PROJECTS

Police Surveillance Assistant | *Python, Flask, React, GCP, Deep Learning, OpenCV*

- An intelligent surveillance system that can monitor the activities and track miscreants at each location without human intervention. **This project has been recognized by the Government of India.**

Personal Assistant for Blind | *Python, Flask, React, GCP, Docker, OpenCV*

- Created an award-winning, comprehensive AI assistant for the visually impaired, featuring capabilities such as friend detection, currency recognition, and high-accuracy image-to-text conversion. **Received numerous accolades on national and international stages.**

COVID-19 Dashboard | *Dash-Plotly, ReactJS, Flask, Pandas, Snowflake*

- A dashboard that constantly monitors the rise of COVID-19 with a custom-made risk index that takes in account for multiple factors.

DA - Developer Assistant | *Python, Flask, Dialogflow, Git*

- A quick and hassle-free development tool for developers which consist of quick project setup, source control, auto debugging. **I hold a patent for this project with the patent number 201941053665, issued on 03/01/2020**

Motion Detection and Image Captioning based surveillance system | *Python, Pytorch, Pandas, Keras, OpenCV, LSTM*

- An Image captioning software that gets triggered on motion and notify the user about any possession of weapons or illegal activity in the live CCTV feed.

Chatbot for Job hiring and User Management | *RASA-X, Python, ReactJS, PHP, Dialogflow, RestAPIs*

- Developed a versatile chatbot capable of dynamically adapting conversations based on user profiles, accommodating clients seeking services, job seekers, and those in search of FAQs.