

Vaibhav Hawaldar

<https://linkedin.com/in/vaibhavhawaldar> | <https://github.com/Vaibhav260> | Raleigh, NC

EDUCATION

North Carolina State University, Raleigh, NC, USA

Aug 2024 – May 2026

Master of Science in Computer Science

GPA: 4.0/4.0

Coursework: Machine Learning, Neural Networks, Parallel Algorithms, Software Engineering, Object-Oriented Design and Development, Data Analysis and Algorithms, IoT Analytics, Computer Networks, Biometrics

NMIMS University, Mukesh Patel School of Technology Management, Mumbai, India

Aug 2020 – May 2024

Bachelor of Technology in Computer Engineering

GPA: 3.76/4.0

Coursework: Artificial Intelligence, Operating Systems, Data Structures and Algorithms, Database Management Systems

WORK EXPERIENCE

Software Engineering Intern, Ribbon Communications, Raleigh, USA

July 2025 – Present

- Contributed to real-time communication software, enhancing SIP call processing, WebRTC, and TCP/IP networking
- Diagnosed automated and resolved production issues in **Linux/UNIX** environments using log, traces, and shell scripts
- Integrated C/C++ networking libraries with gRPC and RESTful APIs to deliver high-performance distributed systems
- Integrated workflows using Makefiles and Git-based CI/CD pipelines to ensure smooth feature delivery and bug resolution.

Data Analyst, NC State University

May 2025 – Present

- Cleaned and analyzed institutional data to support library analytics and reporting.
- Built interactive Datawrapper dashboards for accurate public and internal library statistics.
- Enhanced NC State Libraries website using PHP and Drupal improvements.

Research Assistant, NC State University

May 2025 – July 2025

- Designed and analyzed multi-institutional datasets for early student success prediction using statistical techniques
- Evaluated feature–performance relationships, identifying variability of predictive features across datasets
- Co-authored “*A Study of Early Student Success Prediction using Programming Log Data*” (under review at SIGCSE).

Machine Learning Intern, FutureTayari, Mumbai, India

Dec 2023 – Jun 2024

- Enhanced user engagement by 50% with gamified card quiz using LLM for automated content creation
- Developed React-based front-end with Chakra UI and Framer Motion on a Firebase NoSQL backend
- Automated deployments via a CI/CD pipeline with GitHub and Vercel, improving release speed and reliability

PROJECTS

HealthSync | Full Stack Development (React, Python, Firebase, Nextjs, HTML, CSS, LLM, AI)

- Developed a Next.js-based health portal an admin dashboard with ChartJs libraries, and a responsive UI using Tailwind
- Integrated OpenAI & LLM for automated medical report analysis and used NoSQL Firebase for backend
- Implemented CI/CD workflows via GitHub Actions and Vercel, reducing report processing time by 30%

PySpark ETL Pipeline | Python, Big Data, AWS, and Cloud Computing

- Implemented an ETL pipeline using PySpark to extract data from MS SQL Server and load it into an AWS S3
- Containerized the pipeline using Docker and automated infrastructure provisioning and data workflows with Terraform

Plant Disease Detection using YOLO | Machine Learning, Image Processing, Computer Vision (Python, Yolo, Flask)

- Established a plant disease detection system using SVM, Random Forest, and YOLOv5 and flask for model deployment
- Transitioned to YOLOv8 to reduce training time by 30% using custom annotated dataset to enhance accuracy by 60%
- Co-authored a research paper currently under peer review: “**Revolutionizing Plant Disease Detection in Agriculture**”

TECHNICAL SKILLS

Programming Languages: Python, HTML, CSS, C, C++, Java, TypeScript, PHP, SQL, Swift

Frameworks/Libraries: NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, OpenCV, React.js, Next.js, Flask, Node.js

Databases & Cloud: MySQL, PostgreSQL, MongoDB, AWS (incl. Boto3), Azure, Docker, Kubernetes, Spark

Tools: Distributed Systems, Tensorflow, PyTorch, Jupyter, Git, CI/CD, Linux/UNIX, Flask, MacOS, Xcode

Skills: Web Development, Object Oriented Programming, Deep Learning, Machine Learning, NLP, Computer Vision, grep

Achievements: Finalist – Amazon ML Summer School (Top 0.1%), HackerRank – 5-star problem solver