

# VIRAJ NALBALWAR

☎ +91-9763345872 ✉ [virajnalbalwar@gmail.com](mailto:virajnalbalwar@gmail.com) 💻 [viraj-nalbalwar](https://github.com/viraj-nalbalwar) 🔗 [VNalbalwar](https://www.linkedin.com/company/vnalbalwar) 📁 [Portfolio](#) 🔗 [LeetCode](#)

## EDUCATION

### COEP Technological University

*B.Tech - Computer Science and Engineering - CGPA - 8.69*

Sept 2024 – May 2027

Pune, Maharashtra

### Dr. Babasaheb Ambedkar Technological University

*Diploma in Computer Engineering - Percentage - 99.20% (State Rank: 2)*

Sept 2021 – May 2024

Raigad, Maharashtra

## EXPERIENCE

### CloudOps Intern

*Reliance Jio Infocomm Ltd.*

June 2025 – Present

Navi Mumbai, Maharashtra

- Visited Jio's Network Operations Center (NOC) and Security Operations Center (SOC) to understand real-time monitoring, threat detection, and incident response processes.
- Explored internal routing, subsystems, and physical networking setup of the Jio Data Center to understand infrastructure interconnectivity.
- Studied the Jio 5G architecture, including core network components, network slicing, and cloud-native implementations.
- Worked hands-on with iLO4, iLO5, and iLO6 tools for server provisioning and remote monitoring.
- Participated in setting up physical servers with proper rack mounting, switch configuration, and network redundancy.
- Manually installed and configured OpenStack and OpenShift across multi-node environments using RHEL, including services like Keystone, Glance, Nova, Neutron, and Cinder.
- Used DevStack for rapid OpenStack deployments and experiments on local setups.
- Worked with Docker and Kubernetes to containerize applications and manage orchestration workflows.
- Monitored infrastructure using Prometheus and created insightful dashboards in Grafana.

### Responsive Web Design Intern

*SEED Infotech Ltd.*

June 2023 – July 2023

Pune, Maharashtra

- Developed responsive and accessible web interfaces using Next.js, React.js, and Tailwind CSS, focusing on component-based architecture and performance optimization.
- Transformed static UI mockups into interactive, reusable components with clean JSX and efficient state management using React hooks.
- Applied modern web development practices, including SSR and routing in Next.js to build scalable and SEO-friendly layouts.
- Collaborated using Git and GitHub for version control, following proper commit practices and pull request workflows.
- Utilized browser developer tools and Lighthouse to debug, audit, and enhance UI responsiveness, accessibility, and page speed.
- Recognized for delivering one of the most polished and high-performance front-end projects during the internship review.

## PROJECTS

### CloudInfraLab – OpenStack Deployment | RHEL, DevStack, Docker

June 2025

- Designed and implemented a full-scale cloud lab setup by manually configuring multi-node **OpenStack** on **RHEL 9.2**, integrating services like Keystone, Glance, Nova, Neutron, and Cinder.
- Experimented with **DevStack** for lightweight and rapid OpenStack deployments, suitable for quick testing and demos.
- Deployed and explored **OpenShift** to manage containerized workloads with built-in CI/CD, Operators, and networking capabilities.
- Integrated **Docker** and **Kubernetes** for containerizing applications and orchestrating them within OpenStack and OpenShift clusters.
- Documented detailed setup guides, troubleshooting steps, and environment diagrams for reproducibility and future scalability.

- Built a full-stack web application using **Flask** that integrates advanced Hugging Face transformer models to perform **image captioning, sentiment analysis, speech recognition, and text-to-speech synthesis**.
- Applied modular backend routes for each model and connected them to a responsive frontend interface.
- Enabled **real-time inference** with seamless switching between AI tasks via an intuitive, user-friendly interface.
- Focused on usability, latency reduction, and integration of diverse NLP pipelines within a unified web application.

- Developed a client-side web application that allows users to **securely hide and extract messages** inside images using **Least Significant Bit (LSB)** steganography.
- Implemented a clean, responsive UI using Next.js and Tailwind CSS, featuring **drag-and-drop support**, image previews, and real-time feedback.
- Focused on **no-code usability**, enabling non-technical users to interact with advanced steganographic techniques through a seamless interface.
- Handled image manipulation and binary encoding entirely in the browser, ensuring **user data privacy and offline functionality**.

## TECHNICAL SKILLS

---

**Languages:** C++, Java, C, Python, JavaScript, TypeScript

**Frontend:** Next.js, React.js, Tailwind CSS, HTML5, CSS3

**Backend:** Node.js, Express.js, Flask, MongoDB, Cloudflare Workers

**DevOps & Cloud:** OpenStack, OpenShift, Prometheus, Grafana, Docker, Kubernetes

**Tools & Platforms:** RHEL, Git, GitHub, VSCode, Postman, iLO4/5/6

## CERTIFICATIONS

---

- **Linux Essentials** - DBATU, Lonere
- **Python Programming** - GUVI Geek Networks, IITM Research Park
- **Ultimate Front-End Bootcamp** - Udemy