# **SWAROOP THAKARE**

### **Computer Engineer**

National Nat

Pune, India

Results-oriented Computer Engineer with a strong foundation in full-stack development, Python programming, and machine learning. Proficient in building secure, accessible, and scalable web applications using React.js, Next.js, Node.js, and SQL, with additional expertise in data science workflows, NLP, and model evaluation using Python libraries such as Pandas, NumPy, and Scikit-learn. Demonstrated experience in API integration, responsive design, real-time systems, and cloud deployment (AWS, Docker). Adept at Agile methodologies and effective team collaboration, with a proven record of delivering end-to-end digital and intelligent solutions.

# **EDUCATION**

# Bachelors of Technology in Computer Engineering

**Pimpri Chinchwad College of Engineering** 

<sup>■</sup> 08/2022 06/2026

Pune, India

## **PROJECTS**

### **Accessible Public Transportation System Website**

Tech Stack- Node.js, MySQL, JavaScript, HTML5, CSS3

- Designed and deployed a WCAG 2.1-compliant accessible public transit website for users with visual, mobility, and cognitive impairments.
- Developed high-contrast mode, ARIA tags, screen reader support, and a real-time route planner using live APIs.
- Implemented Python scripts for route optimization, improving planning efficiency by 40%.
- Enhanced low-bandwidth performance through backend data optimization.

#### Freelancer Management System (FMS)

Tech Stack: MongoDB, Express.js, React.js, Node.js (MERN Stack)

- Engineered a scalable platform to manage freelancer profiles, task allocation, payments, and performance tracking
- Implemented role-based access control, secure authentication, and dynamic dashboards for clients and freelancers
- Utilized Agile methodology with Jira for sprint planning and GitHub for CI/CD workflows
- Enhanced task tracking efficiency and streamlined remote collaboration for global teams

#### College Connect - Al-Enhanced Academic Platform

Tech Stack: Next.js 14, React 18, TypeScript, Tailwind CSS, PostgreSQL + MongoDB (hybrid architecture), WebSockets, NextAuth.js, OpenAl API

- Designed and implemented an all-in-one academic management platform aimed at streamlining student-faculty interaction
- Developed modules for course registration, real-time messaging, event scheduling, and academic resource sharing
- Integrated secure authentication using NextAuth.js and JWT, along with real-time communication via WebSockets
- Planned integration of OpenAl API to offer personalized academic assistance and smart planning for students
- Designed roadmap for reinforcement learning integration to enhance adaptive learning pathways and academic resource allocation.

#### Machine Learning-Driven News Veracity Detection System

- Tech Stack: Python, Scikit-learn, Pandas, TF-IDF, NLP, Logistic Regression
- Built and deployed a classification model to detect fake vs real news.
- Performed text preprocessing: tokenisation, stemming, stop word removal.
- Used TF-IDF vectorisation and tested multiple classifiers.
- · Achieved high accuracy using Logistic Regression; evaluated with confusion matrix, precision, recall.
- Designed the system to be scalable and explainable for real-time misinformation detection.

### **EXPERIENCE**

### Public Relations Account Executive

#### ACM PCCOE, CESA ,PCCOE · Full-time

Contributed as a full-time member of the Student Council of the Computer Engineering Department at PCCOE, driving academic and
technical initiatives. Managed communications between stakeholders, faculty, and external partners, ensuring seamless coordination of
events and fostering strong professional relationships. Led a team of 10, mentoring junior team members to improve communication skills,
organisational abilities, and team collaboration.

#### SKILLS

- Programming Language: Python (Advanced), C++
- Web Development (Frontend & Backend): HTML5, CSS3, JavaScript, TypeScript, PHP, React.js, Next.js, Redux, Tailwind CSS, Bootstrap, Node.js, Express.js, RESTful APIs, GraphQL
- Databases: MongoDB, Firebase, MySQL, SQL, PL/SQL, Data Modelling
- Project Management Tools & Methodologies: gile/Scrum Methodologies, Jira (Advanced Workflows), Confluence, Slack, Project Boards
- Cloud & DevOps: AWS Cloud Foundations (Certified), AWS Data Engineering (Basic), Docker (Basic)
- AI/ML & Data Science: Scikit-learn, Natural Language Processing (Tokenization, Stemming, TF-IDF), Supervised Learning (Classification, Regression), Model Evaluation Metrics, A/B Testing
- Soft Skills: Team Collaboration, Communication, Problem-Solving, Ownership, Adaptability

#### Certifications

- AWS Academy Graduate Cloud Foundations Amazon Web Services (AWS)
- AWS Academy Graduate Data Engineering Amazon Web Services (AWS)
- Google AIML Program AICTE (All India Council for Technical Education)
- Master Python and Dive into Generative AI Udemy
- Master SQL, MySQL, PostgreSQL, and MongoDB Udemy
- HTML, CSS, JavaScript, and React Certification Udemy
- Practical Next.js & React Development Udemy