Mandar Rajendra Kelkar

Education

B.Tech (Computer Engineering) – 2023–2026

Vishwakarma University

Diploma (Computer Engineering) - 2020-2023

82.57%

SGPA: 8.95

CGPA: 8.33

Government Polytechnic Malvan

SSC - 2007-2020 88.20%

Jay Ganesh English Medium School

Skill Set

Programming Languages: C, Java, Python, JavaScript, Dart, Solidity

Web Technologies: HTML, CSS, Bootstrap, Tailwind CSS, ¡Query, JSON, RESTful APIs

Frameworks: React, Flask, Django, NodeJS, Flutter **Databases:** MySQL, PostgreSQL, SQLite, MongoDB **Tools:** VSCode, PyCharm, Eclipse, Jira, GitHub, Swagger

Soft Skills: Communication, Teamwork, Problem-Solving, Adaptability, Time-Management, Work Ethic

Languages: English, Marathi, Hindi

Experience

EduPlusCampus (UDNAV Software Services Pvt. Ltd.)

Jun 2024 - Dec 2024

- Contributed to a blockchain-based academic credential system using Solidity, Vite, Tailwind CSS, TypeScript, Express.js, and MongoDB.
- Deployed smart contracts on the Sepolia testnet with Truffle and Ganache to enable secure, automated certificate issuance and verification.
- Helped reduce credential fraud by 60% and enabled real-time global academic record validation via decentralized technologies.

SkillVertex Jul 2023 – Aug 2023

- Completed a 5-week intensive Data Science internship involving data analysis, machine learning, and data visualization.
- Gained hands-on experience with Python, pandas, matplotlib, and supervised learning on real-world datasets.

Projects

• Multi-Factor Authentication System — LINK

Technologies: Flask, SQLite, PostgreSQL, Python, Virtualenv, SMTP, GitHub

- Created a Multifactor Authentication (MFA) system using Flask, reducing unauthorized access incidents by 45%.
- Secure Access Control: Ensured that only authenticated users with valid credentials can access specific pages or functionalities.
- Password Management: Enforced password complexity, implemented hashing and salting, and enforced periodic password changes.
- User Authentication: Integrated MFA methods (SMS codes, admin authorization, OTPs) in addition to username/password.

• TelemedeX — LINK

Technologies: React.js, Tailwind CSS, Node.js, Express, MongoDB, Google Fit API, Razorpay API, Gemini API, Flask, GitHub

- Intelligent scheduling prioritizes patients according to urgency and doctor availability.
- Prescription summary and alternative medicine suggestions based on AI with cost-effective recommendations.
- Google Fit integration provides real-time wearable health data insights.
- Secure Razorpay-powered payment gateway for hassle-free transactions.

• Blockchain-Based Academic Credential Storage and Issuing System — LINK

Technologies: Vite, Tailwind CSS, SCSS, Solidity, Express, TypeScript, MongoDB, Ganache, Truffle, MetaMask, Sepolia, GitHub

- Secured student enrollment, semester progress, and degree issuance using blockchain technology.
- Eliminated credential forgery by up to 60% with automated digital certificate issuance and verification.
- Enabled instant, verified academic record retrieval via a blockchain network.
- Facilitated global verification for employers and institutions, reducing manual validation efforts.

• DataHive Student Leaving Certificate Generation and Management System — ${\tt LINK}$

Technologies: Python, Flask, HTML5, SCSS, PyPDF, SQLite, PostgreSQL, Render, GitHub

- Automated data collection from academic records, attendance, and registration forms, reducing administrative workload by 70%.
- Intelligent processing to compute grades, attendance, and eligibility for certificates.
- Dynamic certificate generation ensuring compliance with institutional formats.
- Robust user management with authentication, role-based access, and activity logging.

Publications

• Hierarchical Clustering in Financial Analysis — LINK

Nov 2024

Explored how Ward's Method and other clustering algorithms can segment companies by financial metrics to inform investment decisions and portfolio diversification. Combined data mining and machine learning to analyze emerging markets, optimize risk assessment, and bolster strategic business analytics.

Awards

NSD Hackathon 2025 (Winner)

Organized by VU & Teklingo, with participation from 45+ teams. Secured first place in the Design and Web Development domain by developing a pet adoption website within the given time. Also achieved second place in the Machine Learning domain by implementing a network traffic anomaly detection system using the KNN algorithm with an accuracy of 80%. Technologies used: React, Node.js, Express, Flask, Matplotlib, Scikit-learn.

• Visionary Techfeast 2023 (Winner)

Conducted by the Visionary Club at VU, where 30+ teams participated. Won first place in the cybersecurity domain by developing a robust multi-factor authentication system that integrated OTP verification via Twilio and email authentication using Python and Flask.

• REX 2023 (Winner)

A prestigious national-level research and project exhibition competition organized by MITM College. Secured first place with the DataHive project, which automated the generation of leaving certificates. Technologies utilized: Flask, SQLite, Vue.js, PostgreSQL, Render.

Certificates

- Coursera: Introduction to Blockchain Specialization 3-course specialization covering blockchain fundamentals, decentralized ledger architecture, and smart contract basics.
- Coursera: Fundamentals of Computer Network Security Specialization 4-course specialization covering network vulnerabilities, threat mitigation, cryptographic protocols, and secure network design.
- Coursera (IBM): IT Fundamentals for Cybersecurity Specialization 4-course specialization covering cybersecurity basics, security policies, network security, and risk management.
- Udemy: The Web Developer Bootcamp Certification 60-hour course covering MERN stack
- Udemy: The Modern Python 3 Bootcamp Certification 30-hour course on Python 3 and Web Scraping.