Aditya Sanjay Chougale

📞 +91 7353167822 | ✉ adityasanjaychougale27@gmail.com | 📍 Hubli, Karnataka

🔗 linkedin.com/in/aditya-chougale-953330259 | 🐙 github.com/aditya-27bytes

EDUCATION

KLE Institute of Technology — Hubli, Karnataka
Bachelor of Engineering in Computer Science and Engineering — CGPA: 8.0 — *Oct 2022 – Present*

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, C++, Rust, SQL, HTML5, CSS3, TypeScript
Web Technologies: React.js, Node.js, Express.js, Next.js, Redux, REST API, GraphQL, WebSockets, TailwindCSS
Frameworks & Libraries: TensorFlow, Keras, PyTorch, OpenCV, MediaPipe, NumPy, Pandas, Chart.js, Material-UI
Databases & Cloud: MongoDB, MySQL, PostgreSQL, Firebase, AWS (EC2, S3, Lambda), Docker, Kubernetes
Developer Tools: Git, GitHub, GitLab, VS Code, Postman, Jest, CI/CD, Agile/Scrum, Jira
Cybersecurity: Penetration Testing, Vulnerability Assessment, Nmap, Wireshark, Burp Suite, Metasploit, OWASP Top 10, Kali Linux, Network Security, Ethical Hacking
Core Competencies: Full-Stack Development, MERN Stack, SDLC, Data Structures & Algorithms, OOP, Machine Learning, Deep Learning, Computer Vision, API Development, JWT Authentication, RBAC, Performance Optimization

PROJECTS

VTUN Note | *React.js, Node.js, Express.js, MongoDB, OpenAI API, JWT* — Dec 2024
- Engineered full-stack MERN application with AI assistant that parses PDF documents to generate summaries, flashcards, and concept maps, reducing study preparation time by 40% for 200+ students
- Integrated OpenAI GPT, Perplexity API, Google Gemini APIs with custom syllabus-aware validation logic achieving 95% accuracy in VTU curriculum alignment
- Developed analytics dashboard using React and Chart.js to visualize study patterns and provide personalized recommendations
- Implemented JWT authentication, RBAC, RESTful APIs, and MongoDB optimization supporting 1000+ concurrent users with sub-200ms response times

Solar Shield - NASA Space Weather Monitor | *Rust, WebSockets(Discord), NASA API* — Nov 2024
- Architected high-performance Rust backend processing NASA DONKI API data with sub-100ms latency handling 10,000+ data points per minute
- Built responsive React dashboard with WebSocket integration for live solar flare alerts and CME tracking with push notifications
- Optimized memory management using Rust's ownership model and Tokio async runtime, reducing resource consumption by 60%

Educational Keylogger Simulation | *Python, Windows API, SMTP, Cryptography* — Oct 2024
- Developed cybersecurity tool demonstrating keylogger attack vectors and defensive countermeasures in controlled sandbox environment for security awareness training
- Implemented Windows API hooks, encrypted data transmission, and SMTP simulation to educate on malware behavior and detection methods

AI Hand Gesture Recognition | *Python, OpenCV, MediaPipe, TensorFlow, CNN* — Sep 2024
- Built real-time computer vision system using CNN achieving 95%+ accuracy in gesture classification with 30 FPS
- Optimized TensorFlow model through quantization and pruning, reducing latency by 40% and model size by 60%

Productivity Extension | *JavaScript, Chrome API, HTML/CSS* — Aug 2024
- Built "Scroll Shame" a Distraction-Free YouTube extension with viewing analytics and blocking recommendations and autoplay with detailed analytics on viewing habits

CERTIFICATIONS & ACHIEVEMENTS

Cybersecurity: Master Program (Vijesha IT), Google Cybersecurity Professional, Tata Cybersecurity Analyst

Cloud: AWS APAC Solutions Architecture, Python Bootcamp (Udemy)

Labs: 50+ penetration testing labs on Hack The Box and TryHackMe (privilege escalation, OWASP Top 10, CTFs)

Leadership: Media Team Head at KLE Institute managing event coverage and digital content strategy