Manmath Mohanty

Phone: +919752834140
Email: manmath.mohanty@adypu.edu.in

LinkedIn • Github • CodeChef • Codeforces • Leetcode • Personal Portfolio

PROFESSIONAL SUMMARY

Full-Stack Software Developer and physics-based simulations, and Linux systems.Multi-hackathon winner. Strong expertise in open-source development, and data structures & algorithms. Proven track record in high-performance frontends, reactive libraries, and distributed systems driven by developer productivity, performance optimization, and real-world simulation engines.

EDUCATION

Bachelor of Technology (AI ML) — 2024 - 2028
Newton School Of Technology,Adypu Pune — Grade: 8.64/10.0

Intermediate (Class XII) — 2023 - 2024
Sri Sankara Vidhilaya , Bhilai — Grade: 70.0%

Matriculation (Class X) — 2021 - 2022
Jyoti hr sec eng med school , Durg — Grade: 85.6%

INTERNSHIPS

Frontend Developer UI Designer — April 2025 - Present
Get Interview Confidence — *Pune*

- Improved user experience by **30%** by building responsive UIs with **Next.js** and **Tailwind**.
- Reduced development time by **25%** by converting Figma designs into reusable UI systems.
- Collaborated with **3+** product and design teams to deliver accessible, production-ready interfaces across platforms.

PROJECTS

Trajectory Detector (Github) (Demo) — December 2025

- Built a **real-time mission-control dashboard** using React.js, Next.js, TailwindCSS, and Framer Motion, achieving **200ms UI latency** across **10+ live telemetry streams**.
- Developed **Node.js/Express backend services** with MongoDB and WebSockets, streaming **5K+ events/min** with **99.9% uptime**.
- Integrated **3D space simulations** using Three.js, React Three Fiber, and NASA Open APIs, rendering **60 FPS interactive mission visuals**.

MISAI (Github) (Demo) — October 2025

- Built **MISAI's evaluation engine** running **hallucination, adversarial and many more tests.**
- Developed **secure real-time scoring APIs** with **150ms latency** for enterprise and government validation workflows.
- Implemented **multi-model benchmarking pipelines**, improving **evaluation accuracy and throughput by 40%+**.

Exoplanet Detector (Github) (Demo) — September 2025

- Engineered a physics-driven exoplanet detection engine combining transit photometry, luminosity analytics, and ML/NumPy pipelines, achieving **50% higher detection accuracy** on small-radius candidates.
- Applied advanced signal-processing techniques (FFT, wavelet filtering, multi-window smoothing) to classify stellar events and detect micro-scale brightness dips, reducing false positives by **38%** across noisy datasets.
- Engineered a **physics-driven exoplanet detector using transit photometry and ML/NumPy**; applied FFT filtering to detect brightness dips and automated validation with LLM reasoning, improving accuracy by 50%.

CERTIFICATIONS

Finalist Nasa (Link) — August 2024

- **NASA Space Apps — Global Finalist:** recognized globally for innovation and problem-solving.

Security Program Google (Link) June 2024

- **Google Security Program:** Gained hands-on experience in cybersecurity, threat detection, and system defense.

SKILLS

Computer Languages: SQL, C++, Python, JavaScript, HTML, NoSQL, TypeScript
Software Packages: MongoDB, Node.js, Redux, React, Prisma ORM, Linux, AngularJS, Vue.js, Figma, Pandas
Soft Skills: Communication Skills, Responsibility, Teamwork, Creativity, Decision-making, Team Building, Leadership
Others: LLM, Three.js, Hugging Face, API testing, Bash Scripting, Problem-Solving, UI/UX, Git and Github

EXTRA-CURRICULAR ACTIVITIES

- **NASA Space Apps — Global Finalist:** Recognized among top global innovators for tech solution using NASA data.
- **Nirman Hackathon Winner :** Led team to first place by developing innovative real-world solution at Hackathon
- **Customized Linux Distributions:** Built optimized Linux distros with kernel-level tweaks, and custom tooling.