Niranjan Girhe

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Work Experience

Shell|Blockchain Engineer (via Imapactility)   *Oct 2023 – Present , (Remote/ Contractor) Amsterdam, Netherlands*

- Developed blockchain-based platform for digital product passports using MERN stack, Decentralized Identity (DID), Verifiable Credentials, and Solidity. Enables tamper-proof traceability across supply chains, tracking 50+ ESG attributes.
- Engineered a CPMS middleware protocol using **OCPP** and **TSOA-express** to integrate Shell's proprietary OCPP hub with external partners, connecting 500+ charging stations and reducing configuration time from a full day to just 10 minutes.
- Led frontend development of a "Coalition for Content Provenance and Authenticity (C2PA)" portal using **Next.js and ethers.js]**, processing 1000+ media files daily and serve 10+ internal Shell stakeholders by enabling traceability of various media types

Impactility|Full-stack Engineer   *Jan 2023 – Present , Pune, Maharashtra*

- Developed the ServCare platform using **React** and **React Native** to create an all-in-one solution for household appliance repair and electronic waste management, serving 30000+ households and resulting in a 400% increase in service requests
- Architected and implemented a Self-Sovereign Identity (SSI) solution using **Polygon ID SDK, Flutter, React and TSOA**, designed for 100,000+ daily identities with zero data breach risk, adhering to W3C specs and using Privado ID and Iden3 circuits

Internship

Ontario Tech University - MITACS|Research Intern   *May 2022 – Aug 2022, Toronto, Canada*

- Designed and developed "Threaded Paws," a serious game in **Unity** with modular level design, used by 900 students in a research study, resulting in 85% of participants reporting improved understanding of concurrency concepts and pitfalls.

MIT Academy of Engineering|Full-stack Intern   *June 2021 – Aug 2021, Pune, Maharashtra*

- Developed web app using **Next.JS** to automate elective allocation for 2400+ students. Built custom algorithm from scratch for subject allocation based on CGPA and subject capacity, increasing efficiency by 95%.

Salvation Games|Game Developer Intern   *June 2020 – Aug 2020, Mumbai, Maharashtra*

- Developed hyper-casual Android game using Unity and C#. Implemented in-game shop, and created 3D assets using Blender.

Projects out of hobby

Full-Stack E-Commerce Platform (Next.js) (Tailwind) (shadcn/ui) (Prisma) (MySQL) (Zustand) (Stripe)   Link

- Developed a comprehensive Next.js 14 e-commerce solution with multi-store admin portal and customer-facing storefront. Admin features include product/order management, analytics, and scalable APIs. Responsive frontend offers cart functionality, product filtering, and Stripe integration, utilizing admin portal APIs.

NGAnime - Android Application (Android studio) (Java) (Kotlin) (Web scrapping) (Jsoup)   Link

- Developed Android app aggregating anime content from multiple platforms, featuring unified interface, social sharing, personalized watchlists, and automated episode tracking with push notifications.

Research Projects

Smart Traffic System to Optimize the City Traffic (Unity) (C#) (Python) (Git) (Firebase) (IoT)   Link

- Developed algorithms for smart traffic system for optimal green light timing. Tested using Unity-based real-life traffic simulator.

Shetkari Mitra - Mobile App for Farmers (Android studio) (Firebase) (Java) (AWS) (Image Processing) (ML) (Flask)   Link

- Developed award-winning Android app for farmers using Java and Android Studio. Features include forums, expert connections, weather info, and ML-based soil analysis from camera images.

Skills

Languages: (TypeScript) (Javascript) (C#) (C++) (HTML) (Python) (Java) (Kotlin) (Solidity)

Frameworks: (React) (NextJS) (React Native) (Flutter)

Other: (Amazon Web Services) (Azure) (MongoDB) (SQL) (NodeJS) (Unity) (Blender) (3D modeling)

Certification: AWS Certified Cloud Practitioner, Microsoft Azure AI fundamental, Microsoft Azure fundamental

Achievements

Winner - UNESCO-India-Africa (UIA) Hackathon Know more   2022

- Led diverse team of four to develop an innovative Android app that generates soil health reports using image processing and deep learning, earning recognition and a 300,000 INR prize presented by the **Education Minister and Vice President of India.**

Winner - Smart India Hackathon Know more   2022

- Built a web portal for labor complaint handling. Won 100,000 INR prize in national competition with over 400,000 participants.

Winner - MAEstro 2023 Award Know more   2023

- Recognized as best outgoing student 2023; awarded 100,000 INR for academic excellence and contribution to the University.

Finalist - Singapore India Hackathon   2023

- Developed blockchain-based (NFT) carbon footprint monitoring system for tracking and offsetting emissions.

Education

MIT Academy of Engineering   *July 2023*

Bachelor of Technology - Computer Engineering - CGPA: 9.74/10   Pune, Maharashtra