SOMESH BANERJEE

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SUMMARY

- Programmer with **2.5+ years** of experience focusing on blockchain and backend development.
- Proficient in Solidity and adept at creating smart contracts.
- Backend expertise includes Node.js, NestJS, TypeScript, and database management with MongoDB and PostgreSQL.
- Skilled in containerization (Docker) and web server configuration (Nginx).
- Versatile programming skills in Python, Bash, and C++.
- Exploring zk Proofs and cross-chain Interoperability solutions.

EXPERIENCE

Teliolabs Communications Inc.   July 2023 – Present
Software Engineer   *Remote*

- Led the design and development of backend systems, implementing smart contracts and web3 solutions.
- Built and optimized an NFT marketplace supporting both on-chain and off-chain payments for asset sales and ownership verification.
- Implemented BFF architecture to integrate internal microservices with third-party APIs, streamlining client interactions, and optimizing data aggregation and storage with MongoDB
- Engineered high-performance RESTful APIs with advanced caching and optimization, refining database schemas and business logic for superior scalability and efficiency.
- Created automation scripts to improve the development experience.

Teliolabs Communications Inc.   Dec 2021 – June 2023
Software Engineer Intern   *Remote*

- Gained experience in PERN stack web development and deployment using docker and nginx.
- Developed ERC721 smart contracts with royalty features for Ethereum and Polygon.
- Designed and implemented database schemas and RESTful APIs using Express.js.
- Gained familiarity with AWS cloud platforms during project implementation.

SKILLS

Programming Languages: TypeScript, Solidity, C++, Circom, Python, Bash, Rust
Blockchain: EVM, Smart Contracts, zk Proofs, Chainlink CCIP
Backend Development: Node.js, Express, NestJS, Spring Boot, BFF, Microservice
Database Management: PostgreSQL, MongoDB, MySQL, Redis
Cloud & DevOps: Git, Docker, Kubernetes, Linux, AWS
Frontend Development: React, Redux, Tailwind

EDUCATION

IIIT Naya Raipur   Graduated July 2023
Bachelor of Technology (CGPA: 9.12 / 10.00)

Army Public School   2019
All India Senior School Certificate Examination (94.2%)

ACHIEVEMENTS

- Filecoin bounty winner at HackForTommorrow: Our team won a sum of 20k at this hackathon organized at Devfolio.
- Won a Ledger Nano S Hardware Wallet in the Tezasia hackathon.
- Successfully published research in conferences and a peer-reviewed journal.
- Held leadership roles, including Club Head of an Infosec Club and Organizer of a science exhibition.

PROJECTS

AnonVoting | *zk-SNARKS, Circom, Snarkjs, Solidity*
- PoC for an anonymous voting system using zk-snarks. The Groth16 algorithm was used in this project.
- Users can vote in the public blockchain without disclosing their identity.

Onchain Doc Editor | *MERN, Socket, Solidity, IPFS*
- Developed a doc editor with versioning and IPFS as storage, using the MERN stack.
- Real-time collaboration feature using Socket.
- Ensures integrity by storing version details on the blockchain.

Hospital Records | *Solidity, Reactjs, Web3js, IPFS*
- Built a decentralized App on the Ethereum blockchain using Smart Contract, which helps store patient records in IPFS, making them easily accessible to hospitals.
- Developed the Smart Contract using Solidity and Front-end using Reactjs.

Sealed Bid Auction | *Solidity, Reactjs, Web3js*
- PoC for sealed bid auctions on the EVM blockchain network using smart contracts to remove the dependency on intermediaries, making the system trustless.
- Developed the Smart Contract using Solidity and Front-end using Reactjs.

Metaverse Market | *Solidity, Nextjs, Ethers, IPFS*
- Built an NFT Marketplace for ERC721 NFTs on the EVM blockchain using Smart Contract and Nextjs, and IPFS is used for storage purpose
- Users can create and sell digital assets using cryptocurrency.

CERTIFICATIONS

- Smart Contracts, *Coursera, Completed on February 2022*
- Algorithmic Toolbox, *Coursera, Completed in September 2020*
- Blockchain Basics, *Coursera, Completed in August 2020*
- Operating Systems and You: Becoming a Power User, *Coursera, Completed in July 2020*
- The Bits and Bytes of Computer Networking, *Coursera, Completed in June 2020*
- Using Python to Interact with the Operating System, *Coursera, Completed in July 2020*