

Swopnil Parajuli

parajuliswopnil717@gmail.com | linkedin.com/in/swopnil-parajuli-926a6715a/ | github.com/parajuliswopnil

EXPERIENCE

Senior Software Engineer	May 2024 – Present
<i>Twine Labs</i>	<i>Wilmington, DE</i>
<ul style="list-style-type: none">Led the end to end architecture and implementation of a zk based validity rollup (Twine) which settles it's state on multiple L1 chains (Ethereum and Solana) and Celestia as the DA layer.Led the R&D into a full Ethereum consensus client prover and for private transactions on Twine.Conducted the development of multiple core zk-prover applications viz. twine's execution prover, Ethereum's consensus prover and Solana's consensus prover.Led the development of an orchestrator component for managing and controlling the zk-prover applications on different dedicated GPU instances.Principal contributor in the architecture required for end to end system for both settlement and verifiable bridging flow.	
Blockchain Developer	Sep 2021 – Apr 2024
<i>Venture23 Inc</i>	<i>Sheridan, WY</i>
<ul style="list-style-type: none">Led the R&D into bringing Verifiable Randomness in ICON blockchain using threshold signature scheme.Co-led the bridge team in multi-sig bridge from ALEO-Ethereum which is also the canonical bridge for ALEO.Led the bridge Tezos-ICON bridge project overseeing the maintenance and support for the whole project.Led the project to migrate all the critical legacy code bases of ICON blockchain's Contribution Proposal System(CPS).	
Blockchain Intern	Feb 2021 – Aug 2021
<i>Techflow Space</i>	<i>Kathmandu, NP</i>
<ul style="list-style-type: none">Led and conducted blockchain workshops in different events.Led the project to write end to end testing suite for Contribuiton Proposal System(CPS) on ICON blockchain	

PROJECTS

- Kachhya (Online learning platform Android app): Built an android app, Kachha. Handled student attendance, sharing reading resources etc. Learned about mobile app development and online database systems like firebase.
- Kharcha (Expenses management Android app)
- Sign Language Interpreter: Built a machine learning model that translated Nepali sign language to nepali text.

TECHNICAL SKILLS

Languages: Rust, Golang, Solidity, Bash, Python, Java

Blockchains: EVM-based, Solana, TEZOS, ICON

ZKP: SP1, RISC0

Data & Infrastructure: SQL, NoSQL, Redis, Message Queues

Developer Tools: Git, Docker, Github, Prometheus, Grafana, k9s

EDUCATION

Kathmandu University	Kathmandu, NP
<i>Bachelor in Computer Engineering</i>	<i>Nov. 2017 – April 2022</i>
Trinity International College	Kathmandu, NP
<i>High School, Science Major</i>	<i>June. 2015 – March 2017</i>