Ali **Shariatmadari**

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Skills

Languages	Python, C/C++, TypeScript/JavaScript, Solidity, Kotlin, Java, ARM & MIPS Assembly, SQL
Frontend	React, React Native, Tailwind, HTML/CSS, Swing, JavaFX, Figma, Photoshop, Illustrator
Backend	Node.js, Express, Docker, Kubernetes, AWS, Hardhat, MongoDB, MySQL, Flask, FastAPI, Django

Experience

PostGrid – Software Engineering Intern — Toronto, ON | *Jan 2024 – Apr 2024*
- Developing backend services and deploying scalable infrastructure for global mailing and address verification services

Bloq – Software Engineering Intern — Chicago, IL | *Sep 2022 – Dec 2022*
- Developed and deployed containerized infrastructure using Kubernetes, Docker and Node for cryptocurrency staking on AWS
- Implemented 4+ JRPC and IPC proxy services for authorized execution and monitoring using Docker-Compose and Express.js
- Wrote tooling for real-time monitoring of AWS EC2 services with multi-layer authentication on AWS Virtual Private Cloud

Capsule – Software Engineering Intern — New York, NY | *Sep 2022 – Dec 2022*
- Spearheaded the development and release of a web3 NFT application using React, Tailwind, and Typescript deployed on IPFS
- Built 20+ responsive React components and setup CI/CD pipelines using GitHub Actions and Husky
- Deployed Solidity smart contracts with **100%** test coverage through automated integration and unit testing with Hardhat

Bloq – Software Engineering Intern — Chicago, IL | *Jan 2022 – Apr 2022*
- Developed real-time profiling and automated backup tooling for microservices using Node.js, Docker, and AWS, expanding profiler coverage by **30%**, and increasing the efficiency of system-wide backup generation by an average of **200%**
- Redesigned the API architecture to support asynchronous request processing and dynamic service routing using an NGINX ingress controller on a Kubernetes cluster, enabling rolling updates and improving scalability
- Integrated various blockchain protocols into existing cloud infrastructure for use in institutional cryptocurrency staking

TD Bank – Software Engineering Intern — Toronto, ON | *May 2021 – Aug 2021*
- Led the development of a banking dashboard with a focus on user customization and predictive content using React
- Built an ingestion pipeline for sanitation and predictive analysis of financial data, and visualized future predictions using Chart.js

Projects

SVG-gen – Graphics with LLMs | **Cohere RAG Hackathon Winner** — *Python, Cohere*
- Generate scalable vector graphics using Retrieval-Augmented Generation (RAG) alongside Cohere's Large Language Models

DiVA – Decentralized Voting | **Hack the North 2021 Winner** — *Solidity, web3.py, Flask*
- Decentralized, anonymous, and fraud-resistant election platform powered by Ethereum Smart Contracts
- Won out of **1,700+** participants, received a developer grant from 1517Fund

CtrlAirSpace – Air Mouse | **Hack the North 2020 Winner** — *Python, Mediapipe, OpenCV*
- A gesture-based HCI enabling hands-free mouse and keyboard control using video-based multi-finger tracking and voice input
- Won out of **2,200+** participants

Vortex – Game Engine — *Java*
- A modular 2D game engine with adherence to OOP principles, display buffering, collision detection, and sprite map parsing
- Utilized the engine to build a two-player 2D shooter game based on the Portal series with support for user-created levels

Lia – Programming Language — *Java, Swing, regex*
- A statically-typed interpreted language with support for 2 primitive data types, math, loops, and type-checking
- Built a lexer using regex for input tokenization and an editor environment using Swing for code execution and error-handling

ShotSpot – Photography Map | **StarterHacks 2020 Winner** — *Python, BeautifulSoup4, Selenium*
- A live map of popular photography locations based on trending photos on Instagram, Won out of **500+** participants

Education

University of Waterloo – Bachelor of Software Engineering (BSE) — *Sep 2019 – May 2025*
- Courses: Algorithms, Data Structures, Concurrency, Operating Systems, Numerical Computation, Compilers, System Design