Ali **Shariatmadari**

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Experience

Robinhood – Software Engineer **Toronto, ON |** *May 2025 – Present*
- Responsible for retail trading, staking, and intra-venue settlements of cryptocurrencies
- Developing internationally compliant trading systems providing 24/7 liquidity to 26M+ traders with Golang & Python

Bitgo – Software Engineering Intern **Palo Alto, CA |** *May 2024 – Sept 2024*
- Implemented instant ACH deposit/withdrawals for retail customers in a purely functional code-base with fp-ts
- Built notification system for off-exchange asset settlements between partners using TypeScript and fp-ts

PostGrid – Software Engineering Intern **Toronto, ON |** *Jan 2024 – Apr 2024*
- Created a tailored tracking feature for physical mail to increase customer conversions for clients using React and Typescript
- Sped up build and test time in CI by 2x by implementing incremental caching strategies using Github Actions and Docker

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

Capsule – Software Engineering Intern **New York, NY |** *Sep 2022 – Dec 2022*
- Spearheaded the development and release of a web3 application using Typescript, Solidity, and Hardhat deployed on IPFS
- Built 20+ responsive React components, setup CI/CD pipelines, using GitHub Actions and Husky

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

TD Bank – Software Engineering Intern **Toronto, ON |** *May 2021 – Aug 2021*
- Led the development of a banking dashboard prototype 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

Education

University of Waterloo – Bachelor of Software Engineering (BSE) *Sep 2019 – April 2025*
- Courses: Machine Learning, Distributed Systems, Concurrency, Compilers, Graphics, Operating Systems, Algorithms

Projects

Counter-Strike – 3D Game Engine *C++, OpenGL*
- Built a real-time FPS in C++/OpenGL with dynamic lighting, physics, bullet impacts, texture mapping, models, and animations

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

Skills

Languages	Golang, Python, Rust, TypeScript/JavaScript, C/C++, Java, Kotlin, Racket, Solidity, ARM & MIPS Assembly, SQL
Frontend	React, React Native, Tailwind, HTML/CSS, Swing, JavaFX, Figma, Photoshop, Illustrator
Backend	Node, fp-ts, Docker, Kubernetes, AWS, Hardhat, MongoDB, PostgreSQL, MySQL, Flask, FastAPI, Django