Manasbir Bagri

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Technical Skills

- **Programming - Rust, TypeScript (TS), JavaScript (JS), Python, Solidity, Huff, React, C++**
- **Design - Figma, Photoshop, Inkscape**

Education

Mathematics (Honours) Co-op, University of Waterloo | Sept 2024 - Present (Expected May 2029)

- GPA: TBD
- Distinctions: President's Scholarship

International Baccalaureate Diploma Programme (IB DP), Johnston Heights | Sept 2022 - May 2024

- President of: Touching Grass Club, Model UN, Robotics Club, and Business Club
- HL: Math AA, Physics, Chemistry
- SL: Language and Literature, Global Politics, Spanish

Experience

Software Engineering Intern/MEV, Protecc Labs | Full-time/Part-time, June 2023 - Present

- Earned $100,000+ by implementing and optimizing MEV strategies in Rust.
- Managed $500,000+ by creating market maker functionality in Rust and TypeScript.
- Created $1,000,000+ in volume for client tokens with Rust and Typescript.

Contract Developer, Self-employed | Part-time, May 2022 - Present

- Created a protocol with $1.2+ million TVL using Solidity and Javascript.
- Secured 50+ first bids on NFTs by creating and optimizing strategies in TypeScript.
- Helped rescue funds by developing programs using Rust.

Software Engineering Intern, You are Matrix| Full-time, April 2022 - July 2022

- Optimized Solidity code by minimizing storage and memory reads and writes.
- Created turn-based blockchain games using Solidity.

Projects

Offline-Wallet (github.com/cesarhuret/offline-wallet) | ETHWaterloo 2023

- Facilitated offline cross-chain Ethereum payments using QR codes and private key signing with an app built in React Native and account abstraction infrastructure built in Solidity.

UNAI, AI calendar/planner (github.com/manasbir/unai) | 2023-2024

- Calendar that would adapt and learn to a user's specific needs, built with TypeScript, Next.js, Tailwind, and GPT 3.5.

Watccha, Ethereum Wallet Tracker (github.com/manasbir/watccha) | 2023

- Modular Ethereum wallet monitoring tool with generalized calldata decoding and notifications with the ability to react on-chain, built with Rust and GPT 3.5 for decoding into natural language.

Square Root Algorithm Optimization (github.com/manasbir/sqrt-optimizooooooor)| 2022- 2023

- Implementing and optimizing the integer square root algorithm in Huff, an EVM assembly programming language.
- Committed implementation to Huffmate, the Huff standard library.

F1 DRS Analysis (github.com/manasbir/f1-telemetry) | 2023

- Python data analysis to measure the effectiveness of DRS between teams in the Formula 1 2023 season.

Interests

- **Optimization**: Code, Open-source contributions, Square Root Algorithms (Hobby and Math Project, github.com/manasbir/sqrt-optimizooooooor), PvP Tetris (Top 1% APP), Speedcubing (PB: sub-15s), Jungling in League of Legends (Macro), Pump it Up (Energy conservation WIP, S11, D10)
- **Competitions (won prizes at all)**: ETHDenver 2022 & 2023, ETHSanFrancisco 2023, ETHNewYork 2023, ETHWaterloo 2023, and Paradigm CTF 2022