

Jackie Liu • 刘嘉伟

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EDUCATION	<i>Cornell University</i> B.A. Computer Science, math specialization <ul style="list-style-type: none">• Coursework: Algorithms, OS, Networks, Databases, Programming languages, Machine learning• Activities and organizations: ACSU, eSports, Film, Shogi, Cornell Blockchain	Dec 2023
WORK EXPERIENCE	<i>Nethermind</i> Software Engineer Intern, MEV Research <ul style="list-style-type: none">• Worked on Flashbots v0.1 in Nethermind C# Ethereum client and cross-chain token recovery• Collaborated with Flashbots organization for MEV infrastructure in Eth2 for ScalingEthereum	May 2021
OTHER EXPERIENCE	<i>Undergraduate researcher</i> <ul style="list-style-type: none">• Develop Rust OS targeting AArch64 architecture, without a C runtime, based on TheseusOS• Advised by Professor Robbert van Renesse <i>DOTS Financial Analyst</i> <ul style="list-style-type: none">• Performed and pitched fundamental analysis of tech sector equities and developed professional skills <i>eSports @ Cornell, Web developer</i> <ul style="list-style-type: none">• Develop and manage website, jointly collaborating with graphic design <i>Aave Wasabi @ Cornell eHub, Founder</i> <ul style="list-style-type: none">• Lead early stage development of DeFi protocol, web app, and tokenomics <i>FTC Robotics, Lead programmer, autonomous control</i> <ul style="list-style-type: none">• Managed small team of programmers working on an Android mobile app for computer vision and sensor integration	Sept 2022 Sept 2022 Sept 2022 Feb 2021 May 2019
SKILL STACK	Common: Proficient in Python, Javascript/Node.js, Solidity; some experience with Rust, Go, C, C#, OCaml, Java, Typescript Tools: Linux, WSL, AWS, git, LaTeX, Docker Web: React, HTML, CSS, Bootstrap, Twelve-Factor Apps, RESTful APIs Web3: web3.js, ethers.js, Geth, Erigon, Foundry, DeFi, HardHat, Onchain analysis Correctness: Some experience with K ML: numpy, scikit-learn, Jupyter	
SELECT PET PROJECTS	<i>MEV bot</i> <ul style="list-style-type: none">• Distributed objects/microservices for monitoring and executing pure revenue opportunities such as liquidations for lending pools• Express, Redis, Bull JQ, clusters and workers, GraphQL, Docker, AWS, Erigon, Foundry, flash loans and swaps, price feeds• Swimming in the mempool <i>Risk markets protocol</i> <ul style="list-style-type: none">• Protocol and interface for exchanging risk and taking directional positions in token markets, e.g. hedging leverage spirals and going long• React and Bootstrap CSS interface, liquidity and external yields from lending pools <i>Language formalization</i> <ul style="list-style-type: none">• Executable semantics for a core subset of Solidity• Definitions using the K framework	