IAN CHAN

Electrical Engineering Major

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EDUCATION

University of Illinois Urbana Champaign – *B.S in Electrical Engineering, GPA: 3.97*   Expected May 2026

- Relevant Course Work (Completed by Summer 2025): Linear Algebra, Computer Systems & Programing, Analog Signal Processing, Intro to Differential Equations, Fields and Wave, Probability with Engineering Applications, Semiconductor Electronics, Digital Systems Laboratory, High Frequency Trading Technology, Data Structures

Technical Skills

Programming Languages: Python, Java, JavaScript, HTML/CSS, C, C++

Technologies / Frameworks: Breadboard, Audio Equipment, Git, SolidWorks, Eclipse, VScode, Basic Soldering and Welding knowledge, Windows, Mac OS, Acernity UI, NextJS, React, Mongo DB, Shadcn, AWS, Vercel, Flask

PROJECTS

Fully automated AI Video Creation Software – *Developer and Design Engineer*   January 2024 - Present

- Creates viral online content end to end, specializing in videos and pictures. Currently have 22,000 followers on TikTok
- Custom Frontend built with Acernity UI, NextJS, React, and Tailwind CSS. User authentication handles 100+ users per month with self-made middleware. Stripe integration to handle secure and fast payments.
- Backend built with Flask: maintains users, their state, permissions, and handles all server side language model compute

Antivirus and Malware Prevention – *Created an Anti-RAT (Anti Remote Access Trojan)*   July 2021 – January 2023

- Reverse engineered numerous rampant remote access trojan by analyzing over 10,000 lines of java code in order to identify the critical vulnerabilities, backdoors being exploited by the attackers, and methods used by attackers
- Developed numerous firewalls to prevent application session logging protecting user data in the event a RAT is executed and distributing aforementioned java based Anti-RAT Systems protecting over 40,000 users

Algorithmic Trading Bot – *Algorithmic Trader and Developer*   September 2023 – May 2024

- Visualized Data in a jupyter notebook and developed back-testing tools through use yfinance, ta-lib, pandas, and numpy to execute analysis enabling better fitting of model through reinforcement learning for micro indicators
- Designed and constructed a trading algorithm utilizing Elliot Wave theory to execute favorable trades on multiple scales resulting in 61% win rate and 2.139 profit ratio when back tested on NBDA price on a multitude of cryptocurrencies

WORK EXPERIENCE

Square Kettle – *Futures Trading Intern*   August 2024 - Present

- Managing a futures trading portfolio using a discretionary trading strategy, averaging over 5% weekly returns; Shadowing and Collaborating with a senior trader on the Futures Desk, gaining experience on analyzing macroeconomic indicators, achieving an 84% win rate on economic data (e.g., inflation reports, jobless claims) and earnings days

The University of Texas at Dallas – *Post-Quantum Cryptography Researcher*   May 2022 - July 2022

- Conducted in-depth research on emerging vulnerabilities and attack vectors due to the emergence of quantum computing by Engineered a python simulation that demonstrated the quantum resistant ability of many NP-Complete problems
- Authored a paper on potential strategies and methods for safeguarding against quantum computing attacks

EXTRACURRICULARS

Clubs: Illini Blockchain, Illini Solar Car, Traders at Illinois

World Changers: Helped construct a multitude of construction projects around the US

Red Cross: Managed logistics of Red Cross Operation

Food Bank: Distributing foods in my local neighborhood to provide for food for struggling families