Ian Kan

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY — Expected May 2027
Candidate for Bachelor of Science in Computer Science, Minor in Business for Engineers
Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong — June 2023 – August 2023

Relevant Courses: Machine Learning | Computer System Organization | OOP | Data Structures | Functional Programming | Linear Algebra | Multivariable Calculus | Discrete Mathematics

TECHNICAL SKILLS

Programming: Python (Pandas, NumPy, Pytorch) • Java • HTML/CSS • JavaScript • TypeScript • OCaml
Databases / Frameworks: React.js • MySQL • Selenium • Tailwind
Tech: Git • Docker • Chrome DevTools • IntelliJ IDEA • VSCode • Pulsar • Postman • Jupyter Notebook • Microsoft Office
Language: English • Mandarin Chinese • Cantonese

EXPERIENCE

SC Johnson College of Business Emerging Markets Institute — Ithaca, NY
Research Intern — June 2024 – July 2024

- Published analysis and summarized important economic policies and trends in emerging market economies from M&A and stock exchanges data for the annual Emerging Market Multinationals Report through Microsoft Office
- Conducted data collection through CapitalIQ, SDC Platinum on Refinitiv Workspace, and the World Federation of Exchanges, then analyzed and processed financial and market data for presentations on investment strategies

Campus Involvements: Chinese Students Association, Social fraternity (Philanthropy Chair), CFC Fitness Monitor

PROJECTS

CV Builder (Frontend) — December 2024 – January 2025
Personal Project

- Designed and implemented a resume builder website that dynamically generates CVs based on user-provided data
- Utilized React.js hooks and state management to synchronize user input with real-time CV updates in the preview
- Integrated local storage for seamless data persistence, enabled PDF downloads, and deployed the site on Netlify
- Used: HTML/CSS, JS, React.js, Tailwind CS

OCamlType — September 2024 – December 2024
Coursework

- Collaborated in a cross-functional team of 4 using agile workflows to integrate front-end and back-end features while using Git for version control with feature branching, pull requests, and conflict resolution
- Designed and implemented a GUI using LablGTK featuring multiple game modes and dynamic text generation. Leveraged TermL for real-time typing feedback with keystroke validation, dynamically updating user inputs
- Engineered a weighted-probability text generator to produce coherent sentences in advanced game modes
- Created a results analysis module to calculate and display WPM, accuracy, and performance graphs using Cairo
- Used: OCaml, Git, VSCode, Agile workflows

Maze-Traversing Algorithm — June 2024 – July 2024
Coursework

- Implemented Dijkstra's algorithm and recursive DFS in Java to find the fastest route through a weighted digraph
- Used PQueues, Hashsets, and ArrayLists to calculate optimal path for maximizing coin-collection within a step limit and increased average score by 400% by calculating density coin value per step count
- Achieved 2nd highest average score in the class for most efficient pathfinding and coin-collecting algorithm
- Used: Java, IntelliJ IDEA, Data structures

Web-Scraping Bot for Sports Betting Optimization — February 2024 – April 2024
Personal Project

- Implemented rotating proxy system with undetected_chromedriver to bypass Cloudflare DDoS using Zenrows APIs
- Created an automated web-scraping bot to collect daily prop data from PrizePicks and 1000s of rows from sports-
- betting bookkeepers, then analyzed collected data using Pandas framework to compare and optimize betting odds
- Used: Python, Pandas, Selenium