# Brian Wei Hao Ma

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## Experience

Software Consultant, Connective Capital Management – Palo Alto, California, USA Jan 2025 – Present

• Developed custom web scrapers and data pipelines to efficiently extract filing data over the last 15 years from over 900,000 companies

#### Software Developer, Nexus Energy - Toronto, Ontario, Canada

- Redesigned and improved database synchronization program, eliminating all out of memory and table locking errors and yielding an average speedup of 500%
- Developed a backfill program to automatically monitor and download accordingly any data that was not captured by the old data pipelines, significantly reducing the frequency of discrepencies for the finance team
- Maintained and developed the company's entire python codebase
- Carried out IT related tasks for the company

## **Personal Projects**

#### **MISOReports**

- Led the development of a comprehensive Python library that streamlines the extraction of Midcontinent Independent System Operator (MISO) public reports data
- Tools Used: Python, pytest, pandas

### URLJumper

- Developed a Chrome extension to improve workflow, allowing users to map names to URLs and use the name instead of the URL to navigate the web
- Tools Used: JavaScript, HTML, CSS, Chrome Extension API

### csvcheckcli

- Developed a fast command-line tool built on top of csvcheck (a Go module that I developed) to allow for quick and convenient comparisons of CSV files in the terminal
- Tools Used: Go, cobra

# Education

University of Toronto, Honours Bachelor of Science (HBSc) in Computer Science

Sept 2019 – June 2023

- International Collegiate Programming Contest (ICPC) competitor
- Pianist for the Faculty of Engineering orchestra

# **Competitions/Awards**

- ICPC ECNA bronze medalist in 2020
- Educational Computing Organization of Ontario Algorithmic Programming Competition finalist in 2019
- Canadian Computing Competition (Senior Division) distinction in 2019
- Euclid Mathematics Contest distinction in 2019

### Skills

**Programming Languages:** Python, Go, SQL, JavaScript, C, Java, C++, Dafny, Shell Programming **Others/Keywords:** algorithms, OOP, pytest, pandas, scrapy, onsite-servers, virtual machines, hardware

### Languages

English (native), Japanese (working proficiency), Mandarin (working proficiency), Cantonese (conversational)

Sept 2024 – Dec 2024

Jan 2024 – Present

Nov 2024 – Dec 2024

Jun 2024 – Aug 2024