

# TIM CHEN

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## Education

### University of Toronto

Honours Bachelor of Science in Mathematics (Probability & Statistics)

Toronto, ON

Expected Graduation 2026

- Minors: Computer Science, Statistics

- Relevant Coursework: Machine Learning, Data Analysis I & II, Databases, Statistical Theory, Software Tools and Systems Programming, Software Design, Computer Programming, Mathematical Theory of Finance

## Professional Experience

### Frontend Software Engineer Intern

MAYOHR

Taipei, Taiwan

May 2024 – August 2024

- Core-engineered on MAYOHR's Frontend, delivering features using TypeScript, RESTful APIs, and React.
- Developed a high-traffic website with TypeScript, HTML, and CSS, cutting resolution time by **30%**.
- Simulated and analyzed data sets with Python for front-end testing, cutting integration bottlenecks **25%**.
- Designed data-access features with product managers, streamlining troubleshooting, boosting efficiency **40%**.

## Activities

### Events Executive

ROCSAUT - University of Toronto

Toronto, ON

April 2023 – March 2024

- Organized large-scale events for **250+** attendees, cutting costs by **15%** while adhering to university policies.
- Conducted Excel-based analyses (Pivot Tables) to optimize logistics, enhancing efficiency and mitigating risks.
- Demonstrated strong communication and organizational skills in a fast-paced environment, managing activities.

## Projects

### Toronto Crime Analysis | R, Quarto

December 2024

- Developed an interactive report analyzing violent crime patterns in Toronto using Bayesian logistic regression.

### HoopsHub | Java, Python

December 2024

- Designed an interactive app for managing user accounts and analyzing NBA statistics with a guessing game.

### Forecasting the 2024 U.S. Presidential Election | R, Quarto

November 2024

- Built a state-level forecast to predict Electoral College outcomes using regression models and polling data.

### Toronto Shelter Analysis | R, Quarto

September 2024

- Conducted a detailed analysis of shelter trends, uncovering high demand and winter spikes in Toronto.

### Analyzing Traffic Collisions in Toronto | Tableau

April 2024

- Explored temporal and spatial patterns of traffic collisions in Toronto using interactive Tableau dashboards.

### Bike Theft Analysis | R, R Markdown

March 2024

- Developed a report analyzing bike theft patterns in Toronto, highlighting high-risk areas, times, and bike types.

## Skills

- **Languages:** Python, SQL, R, TypeScript, JavaScript, Java, C, Excel, Power BI, Tableau
- **Technologies:** R Markdown, Quarto, RESTful APIs, Git, GitHub, Azure DevOps, React, HTML, CSS
- **Concepts:** Data Analysis, Statistical Analysis, Data Visualization, Machine Learning, Data Cleaning, Database, Data Structures and Algorithms, Analytical Thinking, Problem-Solving, Frontend Development
- **Certifications:** Google Data Analytics Professional Certificate: (Data Analysis, Data Cleaning, Visualization, SQL, Tableau, and R.) Includes hands-on practice in preparing, analyzing data, and creating dashboards for insights.