# YIFEI MAGGIE MA

### **HIGHLIGHTS**

- Passionate about generating data-driven insights and visualizations (portfolio: https://maggiema.rbind.io/projects)
- Proficiencies: R Python GIS spatial statistics JavaScript SQL PostgreSQL DBMS data viz. PostGIS
- Positive, intellectually curious, goal-oriented, and committed to personal and professional growth

#### **EDUCATION**

## University of Toronto, Statistics and Human Geography majors, with GIS minor

2017 - 2021

## **AWARDS**

Mitacs Innovation Research Training Award

Sep 2020 - Jan 2021

UTAGA Outstanding Undergraduate Research Award [see certificate]

Oct 2020

COVID-19 Student Engagement Award [interactive dashboard]

Jun 2020

## PROFESSIONAL EXPERIENCE

#### **Contract Researcher**

May 2021 – July 2021

Flipp

- Leverage mobile app usage data to examine the effect of COVID-19 on food shopping behaviors using PostGIS
- Set up functional geospatial database in PgAdmin IV for full data pull of 24M rows and 20GB in size

Planning Intern Sep 2020 – May 2021

City of Toronto, City Planning Division, Strategic Initiatives, Policy and Analysis

- Generated insights on patterns of consistency around pre-determined transit stations using open data sources
- Conduct statistical and spatial analysis to provide next-step data-driven recommendations to city officials

# Geospatial Researcher

April 2019 - Jan 2021

St. Michael's Hospital, Centre for Global Health Research

- Applied statistical models of air quality, traffic fatalities, COVID-19 and residential school mortality using R
- Led spatial component of Bayesian analysis quantifying the spatial effect of COVID-19 among LTC facilities
- Assigned spatial information to sample units, improved spatial accuracy of spatial dataset from 95% to 98%

# Crime Analyst Intern

**Student Consultant** 

Jan 2020 – April 2020

# Toronto Police Service, Analytics & Innovation Unit

- Automated geocoding process using Excel VBA macros and R scripts
- Leveraged ticket and collision data to identify spatiotemporal patterns of traffic and deliver recommendations

## Transcription and Data Analysis Assistant

Dec 2018 - Mar 2019

#### Innovation Hub, University of Toronto

- Provided data analysis support and picked out key themes from design thinking framework
- Presented results to 9 senior level stakeholders and provided guidance on potential solutions that could better students' experience on campus

### **RELEVANT PROJECTS**

Sep 2020 – May 2021

- School of Cities, Multidisciplinary Urban Capstone Design Project [story map]
  - Liaised with clients to build a design solution that aids in creating community within its \$2 billion condo network
  - Led market research, survey development, and wireframe for mobile app and built Figma high-fidelity prototype
  - Collaborated cross-functionally with 4 teams to build client's preferences into the app

Research Team Leader Jan 2020 – Apr 2020

# GGR462 GIS Research Capstone Project [story map]

• Drove statistical analysis using R and GIS of culturally specific restaurant presence in Toronto's ethnic enclaves