# **MEI YI NIU**

# **EXPERIENCE**

OMERS & May 2019 -

Aug 2019 **Full Stack Developer** 



- Revamped the legacy website with a dynamic client portal using Angular and Node.js, improving and streamlining pension processes for 490 000+ members and 1000 employers
- Created an NFR application as a security liaison between the databases and API Docker containers of the website and the front-end processes
- Developed the above application to log all API calls in MongoDB, serving as a front-end tool for administrators and developers to monitor business processes and errors
- Developed a Springboot application to synchronize and update information in Salesforce databases of objects and PL/SQL tables
- Tested the product through various phases of its continuous delivery, including system integration testing, regression testing, user acceptance testing

#### Jul 2018 -**ROYAL BANK OF CANADA** Aug 2018

**Innovation Software Developer/Analyst** 

- Collaborated on innovation projects in Agile methodology to solve business problems faced by teams in different departments at RBC, e.g. problems in financial literacy and recruitment
- Used Angular to develop a website as an internal tool to process inquiries from a system of 80 000+ employees pursuing continuing education, saving \$90 000 per year
- Created and delivered business presentations to executive members of RBC

### **PROJECTS**

#### May 2019 PEST-AI-CIDES Semi-finalist - Microsoft x Agorize Discover AI: Sustainable Life Challenge

- Designed and developed a prototype for a system that calculates efficient routes, techniques, and scheduling of pesticide application using Azure Machine Learning service
- Integrated data-driven techniques into existing Azure FarmBeats architecture to decrease pesticide usage by 22% while maintaining efficacy

#### WEG-BUDDY (7) Feb 2019

- Developed a meal-planning application based in Google App Engine that, using sentiment analysis, recommends meals made with Wegman's products
- Used Cloud Firestore to store and query information about the user so that future meal recommendations could be customized for the user

#### Sep 2018 TRACECAR (7)

- Developed and built from scratch a miniature line-following robotic vehicle using Arduino and motor drivers
- Wrote custom dynamic drivetrain based on inputs from infrared sensors

## **EDUCATION AND AWARDS**

Sep 2018 -UNIVERSITY OF WATERLOO

Present **Bachelor of Software Engineering (BSE)** 

> Isabel Farrar Scholarship: awarded to outstanding female students based on academic and extracurricular achievement

### LANGUAGES/TOOLS

Languages: C | C++ | Java | Python | Javascript | Typescript | Scala | HTML/CSS Tools/Frameworks: Angular | MongoDB | Node.js | SQL, NoSQL, PL/SQL | RESTful APIs Docker | Spring, Springboot | GCP | OData, OLingo | ANT | Arduino