

# JANET WANG

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## EDUCATION

### UNIVERSITY OF TORONTO

Graduation: November 2020

Honours Bachelor of Science, Major in Computer Science and Major in Statistical Science

## PROFESSIONAL EXPERIENCE

### SOFTWARE ENGINEER – TutorOcean

August 2020 – Current

Working on the development team at TutorOcean as a web developer primarily in React and NodeJS

- Improving and implementing a site-wide design overhaul
- Developing technical solutions to meet business requirements, documenting procedural guides

### MOBILE DEVELOPER – TutorOcean

Summer 2019

Worked on the development team at TutorOcean on the first release of their mobile app in React Native

- Built the mobile app UI based on a provided design using secure server calls.
- Implemented a secure payment system using Stripe mobile payment API.

### RESEARCH ASSISTANT - uOttawa BMI Lab

Summer 2017

Publication · September 2019 · Li, L., Abou-Samra, E., Ning, Z. et al. An in vitro model maintaining taxon-specific

functional activities of the gut microbiome. Nat Commun 10, 4146 (2019). <https://doi.org/10.1038/s41467-019-12087-8>

- Participated in design and implementation of research models for in vivo compositional gut microbiome profiles in drug response research, supervised by a PHD research fellow.

## PROJECTS

**MEG** – 4 months – Developed a *minimum viable product* for an online shopping portal *My Ethical Garment* with a React frontend using the *AntD library*, *Flask/SQLAlchemy* backend, *Docker* and *AWS*.

**MNIST** – Investigation of Bayesian Variational Autoencoders (Kingma and Welling 2013) using the famous MNIST data set to predict bottom half of an image based on the top using the trained model with stochastic variational inference (*Python, Julia, autograd, jax, NumPy, Matplotlib*)

**Signal control system** – Implemented parts of a sample *IoT software system Signal* for controlling temperature and humidity using C, exploring handshakes and maintaining TCP socket communication with a central controller.

## SKILLS

**LANGUAGES** – Python, Java, C/C++, C#/.NET, Bash, R, React, React Native, JavaScript, HTML5, CSS, Julia, Verilog

**FULL STACK** – Git, Android Java, Flask, Node.js, MongoDB, SQL/PostgreSQL, Docker, AWS, Heroku

**LIBRARIES/API** – autograd, jax, AntD, SQLAlchemy, ggplot, NumPy, Matplotlib, OpenGL

**OTHER** – MS Visual Studio/VSCode, Unix/Linux, Agile, Kanban, Figma, Photoshop, Premiere Pro

**Technologies** – OOP, Design Patterns, Regex, Relational Databases, Web Programming, Computational Theory, Software Engineering, Systems Programming, UML, Computer Organization, Computer Graphics, Computational Linguistics

**Data Science** – Machine Learning, Data Analysis, Probability Theory