3rd-Year Machine Learning Student at UofT

JULIA L. WANG

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EDUCATION -

University of Toronto | BASc in Engineering Science – Machine Intelligence Major ● Expected Graduation: 2023

- Minor in Business | CGPA: 3.72 | 2018, 19,20 Dean's Honors List, 2020 Morris A. Cohen Scholarship recipient
- Relevant courses: Computer Algorithms & Data Structures, Databases, Artificial Intelligence, Machine Learning

SKILLS -

- Languages: Python, SQL, Verilog FPGA, C, MATLAB, C++ (Arduino), ARM Assembly, JavaScript, R, Dart, NoSQL
- **Technical**: React.js, AutoCAD, Flutter, AWS, HTML, CSS, SCSS, ModelSIM, Flask, report writing, compiling research, Microsoft Office, prototyping, data analysis, business analysis, APIs, mobile & web development

WORK EXPERIENCE -

Software Developer & Data Engineer | Dataraction • September 2020 − June 2021

- Front-end developer for a mobile app using Flutter to allow users to give feedback from chosen criteria, implementing a badge system to ensure reliability, and numerous video, notification, and user models.
- Implementation of IBM Watson, Kubernetes, AWS, and Dialogflow for chatbot and real-time analytics for streamers on the streaming service. Managed database and ran raw SQL queries to aggregate data.

Biomedical Research Student | UofT Institute of Biomaterials and Biomedical Eng | Dr. Leo Chou • Summer 2019

- Measured protein synthesis rate in response to 4 DNA treatments by agarose gel electrophoresis.
- Executed fluorescent imaging, used a biosafety cabinet to passage cells, and introduced model drugs to evaluate effects on the viability of animal cells. Compiled technical reports summarizing processes and results.

PROJECTS

2nd Place - DotsLogistics Project | Agorize AI For Future Business Competition 2021 – RBC, Microsoft, & Technation

- Created an AI logistics solution leveraging ML to streamline b2b and b2c relationships and transactions.
- Second place of 123 teams, delivered a business pitch & a prototype using React.js, CSS, and Power BI.

Optimizing Shoe Storage Systems | BATA Shoe Museum's 2020 Shoe Storage Challenge

- Implemented iterative design relative to stakeholders, objectives, and client-given metrics to compile a design brief summarizing 10+ shoe storage solutions, converging to a Jenga-inspired drawer system.
- Created 3 laser cut wooden prototypes using AutoCAD to assess stability, usability, and accessibility.

Second Place Robot | Robotics for Space Exploration's 2019 SEEK Competition

• Collaborated to design a Arduino (C++) Bluetooth-controlled robot within 6 hours which could turn, stop, drive forwards or backwards, sense obstacles, and completed an obstacle course with an autonomous challenge.

Steadymate Temperature Monitor | UofT CUBE's 2019 Biomedical Engineering 24h Hackathon

• Designed and prototyped a functional body temperature monitor in the form of a bracelet for children suffering from CIPA using Arduino (C++) consisting of temperature sensors, sounds, and LEDs to alert a temperature spike.

EXTRA-CURRICULARS

Environmental Engineer | Sustainable Engineers Association | GreenWall Project ● Sep 2020 – Sep 2021

• Research numerous plants and environmental impact of a greenwall to be implemented on campus post-COVID.

Energy Systems Engineer | UofT Hyperloop Team ● June 2019 - June 2020

- Designing and creating prototypes for a hyperloop pod by compiling research and discussing with 6+ team members to make decisions on battery management, development, safety, and cooling mechanisms.
- Modelling battery configurations using AutoCAD and researching 10+ cooling methods.

Elected First-Year Engineering Science Representative | UofT Engineering Society ● Sep 2018-May 2019

- Engaged in discussion with faculty and teaching staff concerning specific issues and concerns of the Engineering Science class of 260+ to enhance the learning experiences of peers.
- Facilitated weekly events hosting 20+ students promoting positivity, diversity,&inclusivity within the community.