

WEI SHI WANG

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EDUCATION

McGill University, Canada

B.Eng in Honours Mechanical Engineering/Minor in Computer Science

Laurie Seybol Award, John H. Ambrose Scholarship (top 10% in the Engineering Faculty)

Enriched Educational Opportunities Award (Undergraduate Research Excellence Award)

Graduated with First Class Honour in Mech Department (top 10%) and Distinction in Engineering Faculty

Sept. 2014 - May 2019

Overall GPA: 3.70/4.0

Computer Science GPA: 3.86/4.0

WORK AND RESEARCH EXPERIENCE

Amazon Web Service

Software Development Engineer I

Apr. 2020 - present

Vancouver, Canada

- Work for Amazon Macie, a machine learning powered sensitive data detection service.
- Owned and released a highly requested feature to display sensitive data occurrences in classification findings.
- Designed and developed distributed transactional API and results batching algorithm which reduced operational cost by 30%.
- Led Amazon Macie regional build and launch in 5 countries.
- Built pipelines and automation tools to reduce ops load.

Cerence Inc. (formerly Nuance Communication Inc.)

Software Engineer

Sept. 2019 - Dec. 2019

Montreal, Canada

- Developed and maintained cloud services for Cerence in-car speech recognition project.
- Built multi-platform (iOS and Android) companion SDK.

Huawei Technologies Inc., Noah's Ark Lab (Autonomous Vehicle R&D)

Software Development Engineer Intern

May 2019 - Aug. 2019

Markham, Canada

- Developed and maintained the Evaluation project for autonomous vehicle performance evaluation. Worked in an agile development environment and coded in python with tools including ROS, Tensorflow, etc.
- Designed and developed a new metric, "traffic light", for the Evaluation program. Researched on creating adversarial anti-social vehicle using reinforcement learning.

McGill University

Teaching Assistant

Jan. 2019 - Apr. 2019

Montreal, Canada

- Gave tutorials and graded exams for Honours Mechanical Engineering Course: MECH419 Advanced Dynamics.

Nuance Communication Inc.

Software Development Engineer, Devops Intern

Sept. 2018 - Dec. 2018

Montreal, Canada

- Developed an auto-build service (in Java) that auto-detects and builds projects in a tree-like fashion.
- Created an internal command line interface (in Python) and built a docker image that monitors Azure usage in Linux.

University of Pennsylvania, Rehabilitation Robotics Lab

Research Assistant, Supervisor: Prof. Michelle Johnson

May 2018 - Aug. 2018

Philadphía, US

- Work published on IEEE Conference on Rehabilitation Robotics in 2019.
- Proposed humanoid robot learning from therapist's demonstration to automate task-oriented physical therapy.
- Designed learning and control algorithm in Python for Baxter robot using Robotic Operating System.

McGill University

Research Assistant, Supervisor: Arun K. Misra

Dec. 2016 - Dec. 2017

Montreal, Canada

- Work published on International Academy of Astronautics in 2018.
- Proposed and validated an optimal control method for a tethered space system used in space debris removal.

PUBLICATIONS

WS. Wang, R. Mendonca, K. Kording, M. Avery, M. Johnson, (2019), *Towards Data-Driven Autonomous Robot-Assisted Physical Rehabilitation Therapy*, IEEE Conference on Rehabilitation Robotics (ICORR 2019 Toronto). [Published]

WS. Wang, A. K. Misra, (2018), *Optimal Tether-Assisted Space Debris Disposal*, International Academy of Astronautics, American Astronomical Society (IAA-AAS-SciTech-065 2018 Moscow). [Published]

TECHNICAL STRENGTHS

Programming Languages

Java, Python, C, C++, R, HTML, CSS

Software and Tools

Linux, Git, AWS, Azure, Docker, Gitlab-CI/CD, SQL, React, ROS, Hadoop, Tensorflow

Relevant Courses

Applied Machine Learning, Algorithms and Data Structure, Computer System, Software Design, Programming Language, Probability, Statistics, Discrete Structure, Optimization, Robotics