Jason Wang

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Education

2014-2019 **Department of Electrical and Computer Engineering** University of Toronto
Bachelor of Computer Engineering, Minor in Robotics (GPA 3.50)
Dean's Honours List

Technical Skills

Languages: C/C++, C#, VB, Java, Ruby, Python, Verilog, Assembly, HTML/CSS, MatLAB, JavaScript, JQuery, LaTeX, PHP, XML, SQL, PowerShell

Software/Frameworks: Altium Designer, Autodesk Fusion, Dreamweaver, ModelSim, MultiSim, ROS, OpenCV, Tensorflow, SolidWorks, Quartus, Unity3D, Visual Studio

Courses: Introduction to Optics, Algorithms and Data Structures, Computer Networks, Communication Systems, Dynamic Systems and Control, Inference Algorithms and Machine Learning, Operating Systems, Real Time Computer Control, Robot Modelling and Control, Probability and Applications,

Work and Research Experience

2017 May **Medical Imaging Research Intern** Sunnybrook Hospital

- Wrote Matlab code and embedded C/C++ software for signal processing for a new biomedical imaging device using Ultra-Wideband Radar
- Used detection theory to estimate tissue layers under 2.5cm of depth

2016 May **Software Developer Intern** Bell Canada

- Developed and unit-tested callflow orchestration scripts for a Genesys Callcenter system
- Developed an end to end regression testing system using Empirix Hammer for 16 Lines of Business and over 1000 toll free numbers
- Developed an Audio File Monitor that tracks all audio files played in all call centers assisting the testing team

2016 Jan **Rehabilitation Research Student** UHN Department of Rehabilitation

- Researched a device which measures obstructions on city pavement
- Designed a optical/mechanical device that traces bumps on the sidewalk

Presentations

2017 Aug 9 *"Cardiac Wall Motion Detection using Ultra-Wideband Radar during cardiac catheterization"*, Undergraduate Engineering Research Day, University of Toronto

Extracurricular Activities and Projects

Engineering Student Groups

2015-17 **RoboSoccer Software Lead - Computer Vision** *University of Toronto Robotics Association*

- Applying object localization and intelligent object recognition using ROS (Robotic Operating System), Matlab, OpenCV and Tensorflow (Github)
- Working with Control team to create Supervised learning and Control Models for the Robocup simulation league in 2018 under the supervision of our faculty advisor Professor D'Eleuterio

2015-17 **Lead/President** *Hacker Academy*

- Facilitated and Delivered NETtalks to students, focusing on computer security
- Communicated with Sponsors such as GE and created the Machine Learning challenge for the DeepHealth Hackathon, University of Toronto's first healthcare and AI themed hackathon.

Selected Design Projects

2016-Now **Soccerbot** - *Robot team that plays soccer, technologies include SLAM, ROS, OpenCV - In development*
2014-Now **Macabre III** - *Middle age pixellated role playing game made using Unity Engine*
2016 April **Edge Detector** - *Camera edge-detecting software made with NIOS Assembly using 2DFFT filters*
2016 Nov **Wireframe Drawer** - *Simple wireframe drawing hardware made with Verilog HDL*
2016 Feb **Student Club Index Searcher** - *Engineering student club search bar made with Wordpress, PHP AJAX and SQL*

Interests/Hobbies

Interests: Computer Vision, Deep Learning, Reinforcement Learning, Humanoid Robot Modelling and Control, Quantum Physics, Amazon Deep Learning Cloud, Game Development
Hobbies: Fishing, Road Cycling, Piano (Grade 10 Certificate), Ping Pong(High school champion), Chess(High school champion)