

## TECHNICAL SKILLS

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PROFICIENT IN: C/C++, Java, SQL, Ruby on Rails  
FAMILIAR WITH: Python, Perl, Verilog, ARM Assembly, Javascript, MATLAB  
TOOLS: Git, GDB, WinDbg, Jira

## WORK EXPERIENCE

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AUG-DEC 2017	<b>File System Developer at MICROSOFT</b> Designed & implemented end-to-end dehydrated & deferred cloud file copy protocol in NTFS, saving significant bandwidth and disk space when a copy is issued on cloud-stored files (i.e. on OneDrive) Filed patent for the cloud copying technique Implemented various performance improvements and bugfixes for NTFS
AUG-DEC 2016	<b>Database Developer at MAGNA INTERNATIONAL</b> Overhauled Defect Detection & Classification system backend to improve mean query time 5* Optimised database server job scheduling to eliminate performance bottlenecks
JAN-APR 2016	<b>Full Stack Developer at SHOPIFY</b> Created mobile phone payment method for customers in developing countries Improved resiliency of accounting software integrations (Xero & Intuit), reducing unhandled exceptions by 35%
MAY-AUG 2015	<b>Rapid Prototype Developer at TD CANADA TRUST</b> Rapidly created web & Android prototypes involving new technologies for banking (e.g. internet of things), bringing them from ideation to minimum viable product in 4 week sprints
SEPT-DEC 2014	<b>Software/Tool Developer at NANOMETRICS</b> Developed software & firmware for seismometers Verified & debugged prototype PCBs in the lab
JAN-APR 2014	<b>Backend Web Developer at RECOGNIA</b> Built backend & API for website for technical analysis of financial instruments

## PROJECTS

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- **CHORUS - INEXPENSIVE HIGH QUALITY RECORDING (CAPSTONE PROJECT)**
  - Created a system to allow amateur musicians to record better quality vocal/instrumental tracks using easily accessible microphones (i.e. cell phones, laptops) by applying digital signal processing & machine learning techniques.
- **UW AUTONOMOUS SAILBOAT TEAM**
  - Created automatic sail trim control system for an RC sailboat in hardware, and implemented autonomous path planning software, with the goal of racing with zero human input.

## EDUCATION

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University of Waterloo, Waterloo, Canada

- Bachelor of Applied Science, COMPUTER ENGINEERING, 2018. With Distinction

## INTERESTS AND ACTIVITIES

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- Demonstrated leadership through directorships in Orientation Week, Engineering Society & Grad. Committee
- Competitive collegiate e-sports: Team co-ordinator for UW Heroes of the Storm; Team captain for Hearthstone
- Competitive sailor, avid cross-country skier, amateur saxophone player