$\underset{\substack{416\,666\,6542\\\texttt{e2tu@uwaterloo.ca}\\\texttt{http://erictu.com}}$

TECHNICAL SUMMARY

Languages C, C++, Java, Python, Ruby, Bash, Common LISP/Scheme, 8085/MIPS Assembly, HTML/CSS, Javascript, PHP, Ruby, Tcl, LATEX

Tools Emacs, Vim, Git, SVN, Eclipse, Visual Studio 2008–2015

Hardware Arduino, Raspberry Pi, Lego Mindstorm, VEX Robotics

PROFESSIONAL EXPERIENCE

Infrastructure Software Engineer Jan 2016 – April 2016 Peraso Technologies Toronto, ON

- Contributed to the agile development of software for 60GHz embedded devices and acquired a deep understanding of concepts in concurrency and network programming
- Developed a language independent and cross platform (Windows/Linux) testing infrastructure in C/C++ using SOAP for communication
 - Optimized nightly regression running time in half
 - Improved robustness of infrastructure by implementing watchdog and recovery mechanisms
 - Collaborated in the design of a new continuous integration system to replace existing Bamboo software
- Developed and maintained multiple REST APIs and services for Linux and Windows
 Allowed for communication with serial ports to send information to USB devices
 - Implemented the ability for users to change driver and OS settings remotely
- Created and designed language verification test cases for DB2 products
- Wrote scripts in Bash, Batch, and Perl for regression testing
- Gained proficiency in Linux, Unix, and Windows
- Developed a passion for automation of processes

Projects

GITHUB.COM/TUERIC

TopKap 2016 Ruby on Rails App

WatSong 2015 IBM TechChallenge

Arduino Development

Smart Car

2014

■ Created a social web platform which allows users to form communities to share pictures and make captions for them

- Built using the Ruby on Rails framework
- Built a song recommendation app based on song mood using the IBM BlueMix platform, IBM Watson services, and self designed algorithm
- Used a PHP backend and DB2 database to manage song requests
- Wrote a web scraper in Python to extract lyrics from websites
- Designed pathfinding algorithms to traverse a robot through a maze
- Built from scratch using Arduino and light sensors
- Planned using drafting techniques on Google Sketchup

Education and Academic Experience

Computer Science and Pure Mathematics, BCS University of Waterloo 2014 – (Current) Waterloo, ON **Coursework** Elementary Algorithm Design and Data Abstraction, Designing Functional Programs, Object-Oriented Programming, Sequential Programming, Computer Organization, Data Structures, and Logic and Computation

QA Software Developer May 2015 – Sept 2015 IBM Canada Corporation Markham, ON