Celina Tang

SOFTWARE ENGINEERING, 1B

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TECHNICAL SKILLS

- Languages: LabView, Python, C, HTML/CSS, Energia, C++
- Hardware: Texas Instrument roboRIO, cRIO, myRIO, Tiva Lauchpad, BoosterPack, Xbox 360 Kinect

Work Experience

Quanser Consultant Inc., Markham, ON – Software Developer   Jul 2015 – Aug 2015

- Used dead reckoning with XY coordinates from encoders and gyro calculation to accurately track and efficiently transfer robot position over network
- Developed image processing program to analyze RGB data with Xbox360 to demonstrate the extent of its image processing abilities
- Analyzed depth data and successfully manipulated the acquired data to map the surrounding area, which is used in the path planning algorithm
- Presented at National Instrument Week at Texas at the product's launch demo

Project

BoosterCat   Sep 2016 – Nov 2016

- Developed a game on Tiva Lauchpad with the addition of Tiva Boosterpack using Energia
- Utilized data from BoosterPack's accelerometer and temperature sensor to provide a more realistic experience of a per simulation
- Made use of the LCD screen on the BoosterPack for displaying game content and UI

Extracurricular

FIRST Robotics Team 4001 – Team Captain & Lead Programmer   Sep 2012 – Jun 2016

- Reliably led a team of 85 members to win FIRST Robotics Competition Greater Toronto Central Regional in 2015-2016 and played in quarter-final internationally
- Developed and troubleshot an automated control program written in LabView within six weeks, targeted specific functionalities and improved the performance of the robot
- Presented robot design, programming logic, and mechanics to the judges, led to winning Engineering Inspiration Award, Creativity Award, Industrial Design Award, etc.
- Presented introductory lessons to 40 rookie teams on programming with LabView

The Axiom School Newspaper – Editor-in-Chief   Sep 2012 – Jun 2016

- Supervised a team of 35 members to write articles on school-wide events, global issues, and club activities, successfully reached a monthly view of 126
- Edited articles and other materials submitted for publication to improve readability and confer with reporters regarding changes in content, style or organization

FIRST LEGO League – Head Referee   Dec 2014 & Nov 2015

- Provided resourceful training sessions to all referees
- Officiated at FLL competitions to maintain standards of play and to ensure that rules were justly enforced

Awards & Honors

UW President's Scholarship

FIRST Robotics Dean's List Finalist Nominee

For demonstrating leadership, commitment, passion, and technical expertise

"Every Piece Has Its Place" Robotics Award and Bursary

For exhibiting leadership, passion for STEM, and compassion for others

Engineering Inspiration Award

For advancing respect and appreciation for engineering in the community

Top Grades

In Grade 12 Computer Science, Grade 12 Robotics, and Grade 12 Theory of Knowledge

Interests

Art: acrylic and watercolour paintings / sketches of sceneries and people

Games: Skyrim; Witcher 3; Elder Scrolls Online

"Celina was very dedicated and professional at work. She was quite inquisitive when encountered with problems and unfamiliar concepts, which led to great results in her work." – A. Haddadi, Work Mentor