

YUWEI (BILL) TANG

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EDUCATION

Bachelor of Applied Science, University of Toronto

September 2016 - Present

- Major in **Computer Engineering**, minor in **Artificial Intelligence**, 3rd year
- President's Entrance Scholarship / Dean's List, 3.36 cGPA

TECHNICAL SKILLS

Software

- C / C++ / MATLAB / HTML / CSS / Java Script / Python / Assembly Language for NIOS II

Hardware / Mechanical

- Verilog / AutoCAD

Other

- Microsoft Office Suite (Word, Excel, PowerPoint) / SVN

PROJECTS

Website Developer, Personal Website

January 2017 – Present

- Developed responsive webpages with **Bootstrap** using **HTML / CSS / Java Script**
- Started a **Node.js** server using **Express.js**
- Designed icons and other graphical components

Team Member, Ice Vs. Fire **NOIS II Assembly Game**

April 2018

- Produced a 2D multiplayer brick shooting game using **Altera Monitoring Program**
- Separated and manipulated Bitmap data to display interface

Team Member, Polaris C++ Mapping and Navigation System

January 2018 – April 2018

- Conducted State-of-the-Art research on existing geographic information systems (GIS)
- Collaborated with 2 other teammates and built a complete mapping and navigation system from a low-level **API**
- Applied skeuomorphism and other design techniques to the user interface
- Implemented path-finding function using Dijkstra's and A-star algorithms
- Used two-opt and simulated annealing to solve Travelling Salesman Problem
- Debugged and tested key features of the software

Team Member, UofT Runner **Verilog Game**

December 2017

- Designed and simulated a 2D adventure platform game using **Altera ModelSim**
- Implemented gravity and interaction system for player and in-game obstacles
- Wrote and modified code to receive inputs from on-board switches / PS/2 Keyboard and output to VGA monitor

Team Leader, Engineering Strategies and Practice

January 2017 – May 2017

- Drafted solutions from client's need (health and safety issues near Athletic Centre) and presented final design
- Initiated team discussions and interacted with a real client
- Followed a conventional project cycle with Project Manager
- Prepared various technical reports during different design stages

Team Member, Engineering Strategies and Practice

September 2016 – December 2016

- Defined and constructed FOCs (Functions, Objectives, Constraints) from problem statement
- Researched and examined existing solutions
- Utilized design tools and models to evaluate feasibility of different designs

WORK & EXTRA-CURRICULAR EXPERIENCE

Webmaster, University of Toronto Data Science Team

July 2018 – Present

- Managed and designed official website through **WordPress**
- Responsible for web application related tasks

Technical Support Assistant, CAPIC

July 2018 – August 2018

- Conducted data analysis using **Excel**
- Developed webpages for multiple company websites

Team Member, University of Toronto Aerospace Team (Aerial Robotics)

September 2017 – April 2018

- Modelled parts of the quadcopters using **SolidWorks**
- Assembled quadcopters with off-the-shelf components