Jon Toto

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EDUCATION

University of Michigan — Ann Arbor, MI
- College of Engineering — April 2018
- B.S.E. Computer Engineering
- GPA: 3.57/4.0

Garden City High School — Garden City, NY
- GPA: 4.0/4.0 — June 2014

RELEVANT COURSEWORK

- EECS 445 : Machine Learning (currently enrolled)
- EECS 373 : Design of Microprocessor-Based Systems (currently enrolled)
- EECS 281 : Data Structures and Algorithms
- EECS 370 : Intro. Computer Organization

PROGRAMMING SKILLS

- Proficient in C++, Python, MATLAB, VPython, LabVIEW, Verilog
- Certified LabVIEW Associate Developer

RESEARCH & PROJECTS

Summer Undergraduate Research Experience (Robotics Dept.) Summer 2016
- Designed and implemented a random maze generation algorithm.
- Implemented odometry code in C to run on a MAEbot, and code to work with Optitrak tracking system.
- Implemented A* search algorithm in C to traverse generated maze with MAEbot.
- Used LCM(Lightweight Communications Marshalling) to communicate between MAEbot and controlling laptop
- Displayed MAEbot location, maze walls, and path data graphically using VX (an OpenGL wrapper designed at UM).

Research at University of Michigan (Physics Dept.: Sih Lab) Summer 2015
- Designed and built a system to perform Van der Pauw and Hall Measurements in order to determine the resistivity, carrier concentration, and mobility of materials of arbitrary shape.
  - Before samples had to be sent to North Campus for the measurements to be performed, and those measurements could be taken only at room temperature.
  - New system and code allow measurements to be taken in seconds and allow lab workers to place samples in a cryostat to be taken at multiple temperatures.

Modelling of Action Potential in Hodgkin – Huxley Model Fall 2014
- Worked with a team to use VPython to simulate an action potential through a giant squid axon according to the model put forth by Alan Hodgkin and Andrew Huxley.

WORK EXPERIENCE

Instructional Aide(IA) for Robotics 550 : Robotic Systems Lab Fall 2016
- Work with GSI's and Lab Instructor to help develop projects and tutorials for ROB 550.
- Help to maintain Lab area and organization.

Wild Fig Mediterranean Grill, Garden City, NY Sept. 2013-Aug. 2014
- Received and packaged orders for takeout and catering.