# Nam Tran Ngoc

http://namfromnam.com nhtranngoc@wpi.edu | 508.736.0890 231 Russell Street, Apartment 2 | Worcester, MA 01609

### **OBJECTIVE**

Summer internship in Robotics Engineering, Computer Science or Computer Engineering related fields.

### **EDUCATION**

### **WORCESTER POLYTECHNIC**

ROBOTICS ENGINEERING

Aug 2013 - Present | Worcester, MA Class of 2017

### COURSEWORK

Unified Robotics: Mechanism, Sensors, Manipulation, Navigation Systems Programming Concept Software Engineering Introduction to Artificial Intelligence Webware: Computational Technology for Network Information Systems Embedded Computing in Engineering Design Introduction to Communications and

### SKILLS

Networks

#### **PROGRAMMING**

- C Java Shell Arduino Python Robotic Operating System (ROS) LaTeX
- •HTML5/CSS3 Javascript •Verilog
- Matlab

#### **DESIGN**

EAGLE • Solidworks • AutoDesk Inventor

#### **BASIC ELECTRONIC SKILLS**

Surface-mount soldering • Basic machine tools

### **SOFTWARE**

MS Office •Adobe Connect •Echo360

• SharePoint • Adobe Photoshop

### LINKS

Github: https://github.com/nhtranngocLinkedIn:

http://linkedin.com/in/nhtranngoc

### **PROJECTS**

## **UNIFIED ROBOTICS** | Mechanism, Sensors, Manipulation and Navigation

Aug-Dec 2014, Aug-Dec 2015 | WPI

- Team-based project to navigate and map an enclosed space with a Turtlebot running Robotic Operating System (ROS).
- Designed chassis and electrical system for line-tracking, simultaneous localization and mapping, and object-sensing.

#### **SOFTWARE ENGINEERING**

Mar-May 2015 | WPI

- Java-based team project to produce "Sixes Wild", an adaptation of "Candy Crush" variant game.
- Designed and created individual based project "Aces and Kings", a Solitaire variant in Java.

## **WEBWARE** | COMPUTATIONAL TECHNOLOGY FOR NETWORK INFORMATION SYSTEMS

Oct-Dec 2015 | WPI

• Worked in a team of three to build a Jeopardy-like web application that makes use of MongoDB and web API. (http://literallybugfree.info)

### EMBEDDED COMPUTING IN ENGINEERING DESIGN

Aug-Oct 2015 | WPI

• Implemented a Embedded C-based version of Space Invader and Guitar Hero on Texas Instruments' MSP430F5529 Experimenter Board.

#### INDEPENDENT PROJECTS

May 1014-May 2015 | Worcester, MA

- RGB LED Matrix
  - Utilized AudoDesk Inventor for enclosure design and CadSoft EAGLE for circuit board design.
  - Created a 6x10 RGB LED that reacts to music on a ATMega328 microcontroller and MSGEQ7 spectrum analyzer.
- First Person Head-Mounted Display
  - Designed in Solidworks, then laser-cut and assembled with plywood.
  - Provides positional head-tracking with an accelerometer.
- Personal Website
  - HTML and CSS for simple web design. (http://namfromnam.com)
  - Deployed and hosted using Amazon Web Services.

### **WORK EXPERIENCE**

## **A/V STUDENT SUPPORT** Aug 2013- present | WPI, Academic Technology Center

- Audio/Visual Support Large Format Printing
- Troubleshoot A/V Technology Mentor New Hires

#### STUDENT TUTOR January 2016- present | WPI, ECE Department

- Assist in lab projects Evaluate homework and lab assignments for 100+ people
- Hold office hour to ensure students understood course concepts