ANDREW NGUYEN

Electrical Engineering Student

Experience

Junior Researcher

Jan - Apr 2017

Government of Canada

- ▶Developed data analysis utilities for Wi-Fi sniffers and visualized Wi-Fi signal strengths using **R**
- ▶Optimized data processing software in **Visual Basic** which resulted in 15% faster processing of sensor log files
- ▶Performed hardware testing to ensure compatability with software components

Projects

SignBuddy (7)

March 2017

CUHacking I

- ▶Interactive sign language recognizer using a Leap Motion controller
- ▶Used **Python scikit-learn** library and hand-generated training data to classify signs
- ▶Incorporated final product into a web video client

CollaboPiano O

February 2017

IEEE Hardware Hackathon

- ▶Two piano simulators with **Arduinos** that play identical sound on each speaker as an aggregate of both pianos using force sensors as keys
- Allows users to collaborate on music from afar using transceivers and the RadioHead library

TherapyHelper (7)

January 2017

DeltaHacks III

- ▶Web application composed of a **MongoDB** and **Node.js** backbone with frontend done in **Vue.js**
- ▶Lets therapists provide custom self-assessments to patients, and view all patient data in one place
- •Allows patients to complete their homework more conveniently and discreetly online

Web Robot ♥

January 2017

ConU Hacks II

- ▶Intel Edison Arduino robot controlled through user input from a website
- ▶ Capture image/move commands communicated to robot by writing to a .txt file with PHP, then reading from the board

Basic Assembly Simulator (7)

November 2016

Personal

- ▶ A simple parser of RISC assembly instructions, built with C++
- ▶Implemented a priority queue to push events based on the required completion time and pop from the beginning
- ▶Locates and highlights where assembly syntax errors occur, if any exist

andrew.nguyen@uwaterloo.ca

(647)-918-4240

github.com/aanguyen

in linkedin.com/in/aanguyen

Skills

Languages: Java, C++, R, HTML5/CSS3, Visual Basic, JavaScript, VHDL

JavaScript, VHDL

Technologies: Android Studio, Git, Firebase, Arduino, Visual Studio,

Node.js, jQuery, Jira

Education

University of Waterloo

Electrical Engineering

2016 - Present

cGPA: 3.92/4.0 - Average: 90%

Dean's Honour List

Awards

- 2017 US Computing Olympiad
 - Gold Division
- 2016 Nortel Networks Undergraduate Scholarship
- 2016 University of Waterloo
 President's Scholarship of
 Distinction
- 2016 Top 5% on AMC12 (AIME Qualifier)
- 2016 2nd place nationally at ARML

Interests

- Athletics ice hockey, volleyball, soccer
- Music guitar, saxophone, piano
- Languages French, Spanish, Vietnamese
- Machine learning
- Cooking, baking
- (@ @munchmunchmkv)