# Hung-Wei Wu

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## **EDUCATION**

#### University of Minnesota, Twin Cities, Honors: Computer Science, Mathematics

Aug 2014 - May 2018

- GPA: 3.563, Solar Vehicle Project Team member, Treasurer of Philippines Student Association
- Classes Taken: Algorithms & Data structures, Computer Architecture, Operating Systems, Program Design

# **TECHNICAL SKILLS**

- Proficient in: Java, C, Bash, Python
- Familiar with: C++, JavaScript, HBase, HiveQL

#### RELEVANT EXPERIENCE

## Undergraduate Research Assistant, University of Minnesota, Minneapolis, MN

Sep 2016 - Present

- Professor Anand Triparthi Distributed Systems Lab Website: <a href="http://ajanta.cs.umn.edu/">http://ajanta.cs.umn.edu/</a>
- Current Project: Beehive A Parallel Programming System for Graph Problems
- Set up a fully distributive Hadoop cluster across four machines and experience programming with MapReduce
- Imported graph data from SNAP (Stanford Large Network Dataset Collection) into JSON for use with Apache Giraph

# Undergraduate Teaching Assistant, University of Minnesota, Minneapolis, MN

Aug 2016 - Present

- Taught two lab sections for CSCI1933: Introduction to Algorithms and Data Structures
- Used challenging lab exercises and projects to apply what was learned in lecture
- Explained and demonstrated major concepts to facilitate student learning

#### Database Development Intern, UnitedHealth Group, Minnetonka, MN

Jun 2016 - Sep 2016

- Tasked with automating database quality tests that were previously done manually (HBase, Hive)
- Formulated and implemented a testing strategy that significantly cut down testing time
- 21 test cases incorporated into testing protocol

### Innovation Intern, Medical Device Center, Minneapolis, MN

Jun 2015 - Apr 2016

- Worked with postgraduate engineers and physicians to prototype devices that meets clinical requirements
- Wired and programmed microcontrollers to generate stable waves at extreme frequencies
- Worked with pressure sensitive resistors to prototype a device to alert paraplegics of formation of ulcers

#### Mobile Development Intern, Kaj Labs LLC, Minneapolis, MN

Jun 2015 - Sep 2015

- Tasked with adding features as well as security to outdated Android apps
- Worked with a small group of developers to program a briefcase app for lawyers
- Features: intuitive and user friendly file organization, secure login

## Web Developer, Midwest Asian American Student Union, Minneapolis, MN

May 2015 - May 2016

- Wrote custom CSS and HTML to add custom features to a SquareSpace template
- Features: workshop registration, automated emails, real time count down timer
- Leveraged keywords and Google search to make site top three in results related to "MAASU"

# PERSONAL PROJECTS

## Minecraft Mod

- Worked over 100 hours on adding new interactive blocks and tools to Minecraft 1.7.10
- Gained experience working with open source APIs
- Features: Virus Block, Cure Block, Item Replicator, Cursed Sword

## Internet of Things

- Created a black/white grid oscillator that flashes at a different frequency in each cell
- Utilized Java Threads and game loop programming to keep the main loop steady at 60 Hz
- Used to determine the location of Arduino board based on the frequency of light detected

