# **Nelson Liu**

#### **EDUCATION**

University of Washington - Seattle, WA | 2015 - 2019 (Expected) | Cumulative GPA: 3.77 Bachelor of Science, Computer Science & Statistics (Intended)

#### **EXPERIENCE**

University of Washington Computer Science and Engineering - Seattle, WA Noah's ARK Group Undergraduate Research Assistant | September 2015 - Present

- Working with Professor Noah Smith on NLP research projects.
- Used amicus briefs to predict Supreme Court case decisions.

Wireless Lab Undergraduate Research Assistant | June 2015 - August 2015

• Worked with Professor Shyam Gollakota to wirelessly power devices and embedded systems with ambient backscatter.

MIT Computer Science and Artificial Intelligence Laboratory - Cambridge, MA InfoLab Group Research Assistant | June 2013 - September 2014

• Wrote Scheme scripts to dynamically extract JPL and U.S. Election Atlas data for use in the START natural language question answering service.

## SOFTWARE PROJECTS / OPEN SOURCE

SCIKIT-LEARN | Contributor / Google Summer of Code 2016 Participant

2015 - PRESENT | Popular Python machine learning library

- Contributing various patches for enhancements to the project and participating in code reviews of community-submitted pull requests.
- Participating in Google Summer of Code 2016, working on various enhancements to decision tree module (adding new splitting criterion and tree pre / post-pruning).

ASLSPEAK | Best Use of Microsoft Tech / Best Use of Data @ DubHacks 2015 October 2015 | A gesture-based sign language translator.

- Team lead role with a focus on building the classifier and gathering training data.
- Used the Leap Motion to gather training data on sign language, and built an artificial neural network classifier to translate sign language gestures to audio spoken on a computer.

## MYODRONE | Top 30/300+ projects, PennApps Winter 2015

January 2015 | An intuitive method of wearable drone control.

- Team lead role with focus on back-end development.
- Used the Thalmic Labs Myo armband and arm gestures to control a Parrot Drone with 8 directions of movement.

#### FALANGAFONE | Top 20/120+ projects, HackPrinceton Fall 2014

November 2014 | An gesture-controlled music editing tool.

- Used the Leap Motion to enable live editing of .mp3 and other sound files via finger and hand gestures.
- Developed a Flask backend as well as a web front-end for the application, used the Pyo library to modify music on the fly.

## ACHIEVEMENTS / AWARDS

2016 - Scipy Scholarship Recipient

2015 - Best Use of Microsoft Technology / Best Use of Data, DubHacks 2015.

2015 - Winner, Hack The Dot Seattle

2015 - Finalist, AngelHack Seattle

2015 - Winner, Lockheed Martin Code Quest Sunnyvale

2015 - Top 30 of 300+ projects, PennApps Winter 2015

2014 - Top 20 out of 120+ projects, HackPrinceton Fall 2014