# WOO SEOK JUNG

6656 Walnut Street  $\diamond$  Cypress, California 90630 (562)  $\cdot$  760  $\cdot$  8825  $\diamond$  wjung@pugetsound.edu

## **EDUCATION**

### University of Puget Sound, Tacoma, WA

August 2016 - May 2020

B.S. in Mathematics & Computer Science

GPA: 3.79

Relevant courses: Mathematical Statistics, Advanced Applied Statistics, Probability Theory, Mathematical Modeling, Optimization, Algorithms and Data Structures, Software Engineering, Operating Systems, Database Management Systems

# DIS (study abroad), Copenhagen, Denmark

Fall 2019

Relevant courses: Artificial Neural Networks and Deep Learning, Artificial Intelligence, Computational Analysis of Big Data

### RESEARCH EXPERIENCE

### McCormick Summer Research Scholar

Summer 2019

University of Puget Sound

Tacoma, WA

- "Generating Artificial Mouse Ultrasonic Vocalizations using Generative Adversarial Networks"
  - · Applied a complex Morlet wavelet transform to raw mouse vocalization recordings to produce visual representations in the form of scalograms.
  - · Took and downscaled 1-second slices of visible mouse calls.
  - · Implemented a generative adversarial network model trained using NVIDIA's progressive training methodology and produced promising results for  $16 \times 32$  and  $32 \times 64$  resolution scalogram slices.

### WORK EXPERIENCE

### Computer Science Assistant

2018 - Current

University of Puget Sound

Tacoma, WA

· Assisted professors as a TA, grader, and afternoon tutor for Introduction to Computer Science, Data Structures, Architectures, and Operating Systems courses.

# Mathematics Assistant

2017 - 2019

University of Puget Sound

Tacoma, WA

- · Assisted professors as a grader for Introduction to Applied Statistics and Calculus I & II courses.
- · Worked as an afternoon tutor for Linear Algebra, Multivariate Calculus, and Applied Statistics courses.

IT Intern

June – August 2018

First Choice Bancorp

Cerritos, CA

- · Designed and programmed scripts for Windows AD group policies as part of merger and acquisition process.
- · Assisted in migrating mail servers and transitioning mobile device management platforms for over 300 users and user groups as part of the m&a.

#### **PROJECTS**

## Trump Tweets Analysis

Fall 2019

 $qithub.com/wsjung/ANNADL\_final$ 

- · Worked in a team of four to analyze patterns in Trump's tweets (@realDonaldTrump) to predict if from Android or iPhone device.
- · Designed neural network models and selected for best validation accuracy based on raw and balanced datasets using Keras and TensorFlow.

Loggregate Fall 2018

github.com/wsjung/loggregate

Scrum master, DBA

- · Led a team of four in developing a study group management platform implemented using the Laravel PHP web framework.
- · Defined a BCNF optimized SQLite database schema and populated it using a Python script which collected course information from the web

### EXTRACURRICULAR UNIVERSITY SERVICE

Chair, University of Puget Sound ACM Student Chapter	2017 - 2019
Secretary, University of Puget Sound Mathematics Club	2017 - 2018
Webmaster, University of Puget Sound ACM Student Chapter	2016 - 2017

# AWARDS AND HONORS

McCormick Scholar Award

Thomas and Hilda Jack Scholarship

McGill Family Scholarship

Dean's List

Spring 2019, Fall 2018, Fall 2017

### **SKILLS**

Computer Languages Java, Python, R, C, MATLAB, JavaScript, PHP Libraries TensorFlow, PyTorch, Git, Flask, Laravel, Nodejs

Databases MySQL, SQLite

### **AFFILIATIONS**

Association for Computing Machinery Upsilon Pi Epsilon Honor Society

### REFERENCES

Available on request