Woo Seok Jung

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in woosjung
 wsjung

Education

2016–exp 2020 **B.S. Mathematics & Computer Science**, *University of Puget Sound*, Tacoma, WA, GPA: 3.79.

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

Fall 2019 **Artificial Neural Networks and Deep Learning**, *DIS (study abroad)*, Copenhagen, Denmark.

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

Research Experience

2019 **McCormick Summer Research Scholar**, *University of Puget Sound*, Advisor: Adam A. Smith.

"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. Implemented a generative adversarial network model trained using NVIDIA's progressive training methodology and produced promising results for 16×32 and 32×64 resolution scalogram slices.

Experience

2018–2019 **Computer Science Assistant**, *University of Puget Sound*.

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

2017–2019 **Mathematics Assistant**, *University of Puget Sound*.

Assisted professors as a grader for Introduction to Applied Statistics and Calculus and Analytic Geometry courses and afternoon tutor for Linear Algebra, Multivariate Calculus, and Applied Statistics courses.

Summer 2018 **IT Intern**, *First Choice Bancorp*, Cerritos, CA.

Designed and programmed scripts for Windows AD group policies in assistance to the IT department in 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 merger and acquisition.

Summer 2015	**R&D Intern**, *NOVAtime Technology Inc.*, Diamond Bar, CA.

Developed a web visualization of a time clock for simpler hierarchical overview. Researched and developed Korean language localization for the time clock interface. Presented the projects before the company's Board of Directors and Executives.

PROJECTS

Fall 2019	**Trump Tweets Analysis**,	github.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.

Fall 2019	**Un-bottling the data**,	github.com/wsjung/caobd_project.

Created interactive map visualizations for visual analysis of wine features. Designed a LSTM network to analyze wine review descriptions to predict the associated wine's review score.

Fall 2018	**Loggregate**,	github.com/wsjung/loggregate.

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

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

AWARDS AND HONORS

2019	McCormick Scholar Award
2017 – 2019	Dean's List

SKILLS

Languages	Java, Python, R, C, MATLAB, JavaScript, PHP
Libraries	TensorFlow, PyTorch, Numpy, Sklearn, Pandas, Git, Flask
Databases	SQLite