Swanie Juhng

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Education

Stony Brook, NY **Stony Brook University** **Aug 2020 – Expected 2025**

- Ph.D. Candidate in Computer Science. CGPA: 3.87/4.0

Seoul, Korea **Sogang University** **Mar 2015 – Feb 2020**

- B.S. in Business Administration and Computer Science. CGPA: 3.34/4.0

Employment and Experience

Research Assistant **Stony Brook University** **May 2021 – Ongoing**

- Built a novel neural network architecture that utilizes discourse-level and contextual embeddings to predict the Facebook users' level of anxiety based on their status updates; submitted the paper to EMNLP 2022.
- Built dataset to gain a better understanding of cognitive dissonance using discourse parsing and active learning; trained RoBERTa-based classification model.
- Built generative language models that generate texts conditioned on Big Five personality traits and mental health variables such as depression, anxiety, and life satisfaction; in the process of writing paper.

Teaching Assistant **Stony Brook University** **Aug 2020 – May 2021**

- CSE 320 System Fundamentals II (Spring 2021): Held office hours twice a week to help students complete five assignments; wrote a grading program using Criterion to check validity of submitted assignments.
- CSE 260 Computer Science B: Honors (Fall 2020): Helped students understand the basics of data structures and algorithms by explaining how to solve given problems in Java.

Programming Tutor **Sogang University** **Sep 2017 – Dec 2019**

- COR 1009 Computational Thinking (Fall 2017 - Fall 2019): Helped students understand the basics of programming and learn Python grammar.

IITP-Purdue Software Program **Purdue University** **Jun 2018 - Aug 2018**

- Selected as a participant of a 7-week summer software program and funded by the Institute of Information & Communications Technology Planning & Evaluation.
- Built an autonomous power management system with assistance of professors from CNIT department.

Social Entrepreneurship Workshop **Loyola Marymount University** **Jan 2016**

- Designed a social business model involving upcycling.
- Attended seminars on Social Entrepreneurship; visited social enterprises and companies that engage in Corporate Social Responsibility.

Technical Experience

Projects

- **Visualization of World Happiness & Alochol Consumption** (2021). Merged two datasets and built an interactive dashboard that visualizes correlations between happiness variables and metrics of alcohol consumption.
- **Document-Level Sentiment Analysis** (2020). Explored several methods built on the DistilBERT classifier to predict an author's sentiment of a main entity in an article.
- **Adult Dataset Classification** (2020). Used three classification methods to reveal if personal background has control over income; evaluated the strengths and weaknesses of the methods.
- **Waggle Power Management System** (2018). Construct an autonomous power management system to enable Waggle (a wireless sensor platform) to survive in non-urban environments with insufficient network and electricity support, using socket programming and Raspberry Pi.

Key Skills

- **Languages** Python; C/C++; Java; JavaScript; Shell
- **Tools** PyTorch; TensorFlow; D3.js; MySQL; Hadoop; Spark