# 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.

## **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**

#### **Loyola Marymount University**

Jan 2016

- WorkshopDesigned 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