# Guojun Wu

#### Education

# National Taiwan University of Science and Technology (NTUST)

Sep. 2018 - Present

Bachelor of Science in Electronic and Computer Engineering

Expected graduation: June. 2022

**GPA:** 3.49/4.30

Relevant Courses: Calculus A+, Engineering Mathematics I & II (Differential Equation & Linear Algebra) A+

**IELST:** Overall 7.5 (Listening 8.0, Reading 8.5, Writing 6.5, Speaking 6.0)

#### Research Interest

My current research interest is Natural Language Processing, in particular Text classification, Semantic Analysis, and BERT-style Representation Learning

## Research Experience

### Thought Lab, My Brain

July. 2021 - Present

Reasoning based on other's solid works

- Surveyed paper about BERTology and gained insights from an analysis of BERT's attention.
- Analyzed how BERT learns syntactic representations based on the solid results from the analysis.
- Proposed a holistic view that can explain BERT's attention and described it in a blog.

## Mobilizing Information Technology Lab, NTUST

Sep. 2020 - June. 2021

Independent Project

Advisor:Jeng-Shiou Leu

- Proposed the project with the aim of combating fake news based on Natural Language Processing.
- Formed a holistic view through surveying statistical approaches and publicly available datasets.
- Defined the approach as a rating-inference task, which represents a twist from standard text classification.
- Utilized BERT to run a pilot study on a benchmark dataset (i.e., LIAR), with PyTorch and HuggingFace Transformers.
- Collected a relatively larger dataset through web scraper (needed more data according to the pilot study).
- Defined coarse-to-fine classification regimes to investigate a major problem (i.e., class similarity).
- Intended to enhance BERT with additional layers, utilizing all tokens in the final layer of BERT.
- Fine-tuned the models over a pilot dataset (i.e., an exhaustive search over suggested settings).
- Analyzed the results and proposed a new metric that can better evaluate rating-inference tasks.
- After I experienced the magic of BERT, curiosity drove me to study about BERTology.

## **Publications**

#### Guojun Wu, Rating Facts under Coarse-to-fine Regimes, arXiv:2107.06051, July 2021

- Thought through the project and designed the structure of the narrative.
- Drew figures in matplotlib and wrote the paper in LaTex.

#### Technical Skills

Programming Languages: Python, C, HTML/CSS, JavaScript

Developer Tools/Frameworks: Github, HuggingFace, PyTorch, Tensorflow

## Soft Skills/Interests

Academic writing: LaTex, Matplotlib

Language: Chinese (native), English (proficient) Interests: Reading, Basketball, Philosophy