

Yueqi Song (She/Her/Hers)

EDUCATION

Bachelor of Science, Carnegie Mellon University

Aug 2020 - May 2024 (expected graduation)

Dual Degree in Computer Science, Statistics and Machine Learning; Minor in Computational Finance

GPA: 3.85/4.0

Relevant Coursework: Experimental Design for Behavioral and Social Sciences, Machine Learning, Functional Programming, Computer Systems, Parallel and Sequential Data Structures and Algorithms, Imperative Computation, Probability and Statistics, Microeconomics, Macroeconomics.

Computer Languages: C, C0, C1, Golang, Kotlin, Python, Standard ML, x86 assembly, Java, R, Typescript.

PROJECTS

Culturally Diverse Visually Grounded Reasoning:

May 2023 - Current

- A research project that aims to improve performance of visually grounded reasoning on culturally diverse representatives.
- Directed by Professor Graham Neubig and PhD student Simran Khanuja.
- Fine-tuned mUNITER, xUNITER, ViLT, and CLIP on NLVR2 dataset and tested on MaRVL dataset.
- Used analytical tools such as zeno ml to do error analysis on baseline models' performance.

GlobalBench: A Benchmark for Global Progress in Natural Language Processing [[Link to paper](#)]

Oct 2022 - June 2023

- A research project that aims to dynamically evaluate global progress in NLP.
- Directed by Professor Graham Neubig and PhD student Simran Khanuja.
- Designed and built an NLP benchmark named GlobalBench that supports inclusive datasets, evaluates utility and equity, identifies underserved languages, and encourages progress on them.
- Collected datasets and system outputs as initial submissions to GlobalBench.

Classical Music Generation Using GAN

Mar 2022 - May 2022

- A class project that aims to generate classical music using machine learning.
 - Transformed MIDI files into images and then used GAN to generate music.
 - Generated music is categorized as classical music by established classifiers.
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TEACHING

Lead TA in CMU 15-213/14-513/15-513 (Computer Systems)

Pittsburgh, PA

Jan 2022 - May 2022

- Held recitations that help students review coursework and prepare for labs, assignments, and exams.
 - Held office hours and answered more than 150 questions from students.
 - Wrote and proctored exams, wrote and graded labs and assignments.
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WORK EXPERIENCE

Software Engineering Intern at TurboTax, Intuit (Backend)

San Diego, CA

May 2023 - Aug 2023

- Developed TurboTax Taxbot on top of GPT-3.5 and GPT-4 through prompt engineering, enabling users to conveniently file their taxes in a conversational manner instead of dealing with traditional tax forms.
- Implemented an advanced question answering mechanism on TurboTax, integrating GPT-3.5 and GPT-4, empowering users to ask questions related to tax filings when using traditional tax forms.
- Automated the process of performing tests on tax data, enabling tax analysts to easily locate their interest.

Software Development Intern at PreVeil, Inc. (Frontend)

Boston, MA

May 2022 - Aug 2022

- Used Golang to add file status and modification time features to PreVeil's secure file sharing solution, reducing time complexity of PreVeil's file status checking mechanism from $O(n)$ to $O(1)$.
 - Implemented prefix tree structure in file syncing, reducing time complexity from $O(n)$ to $O(\log(n))$.
 - Performed testing of software features and fixed functional bugs associated with lock statuses of files.
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PUBLICATIONS

[2] **GlobalBench: A Benchmark for Global Progress in Natural Language Processing** [[Link](#)]

Yueqi Song, Catherine Cui, Simran Khanuja, Pengfei Liu, Fahim Faisal, Alissa Ostapenko, Genta Indra Winata, Alham Fikri Aji, Samuel Cahyawijaya, Yulia Tsvetkov, Antonios Anastasopoulos, Graham Neubig

Under Review, 2023

[1] **The Slowdown of the Chinese Economy** [[Link](#)]

Yueqi Song*, Yiru Wang*, Zhushan Xiang*

American Journal of Industrial and Business Management, 2019

HONORS

Dean's List (High Honors): fall 2020, spring 2021, spring 2022, fall 2022, spring 2023