

RYU PARISH

Seattle, WA

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EDUCATION

Master of Computer Science, University of Washington 2023 - 2024
Combined Bachelor's/Master's program

Bachelor of Computer Science, University of Washington 2021 - 2023
I was the only accepted transfer student from the state of Texas in 2021.

PUBLICATIONS

Leveraging Language Models to Guide Mutation Testing (*Work In Progress*)

Ryu Parish, Sam Kaufman, René Just
Work In Progress, 2023

INSCIT: Information-Seeking Conversations with Mixed-Initiative Interactions

Zequi Wu, **Ryu Parish**, Hao Cheng, Sewon Min, Prithviraj Ammanabrolu, Mari Ostendorf, Hannaneh Hajishirzi
Transactions of the ACL, 2022

RESEARCH EXPERIENCE

Programming Languages and Software Engineering (PLSE) Lab July 2022 - Present
NLP-SE Researcher *University of Washington*

- Lead NLP+SE project to apply Large Language Models on source code for mutation testing, advised by René Just and mentored by PhD student Sam Kaufman.
- Engineering state-of-the-art mutant selection methods with Transformer-based algorithm utilizing source code.
- Selected by Professor René Just to enroll in this special research-for-credit course, specifically designed for advanced computer science students.

H2Lab Nov 2021 - June 2022
NLP Researcher *University of Washington*

- Conducted pilot studies for Document Grounded, Goal-Oriented Dialogues advised by Hannaneh Hajishirzi under CS PhD student Ellen Wu.
- Developed a system for collecting \$20,000 worth annotations to simulate a two-person dialogue with any number of crowdsourced workers
- Explored many different large language model architectures to determine baselines and trained models on UW's super computer, HYAK.

Code and Cognition Lab Mar 2022 - June 2022
Lablet Discussion Leader *University of Washington*

- Lead active discussions on current state-of-the-art methods for teaching Computer Science with a heavy emphasis on solving structural problems with teaching classical subjects.
- Conducted research under the supervision of two PhD students on the topic of Computer Science Education and structural bias.

Google CSRMP Sep 2021 - Dec 2021
Machine Learning Research Mentee *Mountain View, California*

- Mentored by Google Researcher Dilip Krishnan in a pod of students from MIT and Harvard focusing on Machine Perception.
- Explored areas of Machine Learning research and graduate school programs through 1 on 1 meetings.

- Selected through a nation-wide competition to learn how to negotiate research opportunities, avoid common research pitfalls, and seek positions of leadership.

SOFTWARE ENGINEERING EXPERIENCE

Amazon (AWS) July 2023 - Sept 2023
Software Development Engineer Intern *Seattle, WA*

- Returning to Amazon Lightsail team to continue my work as a Software Development Engineer.

Amazon (AWS) July 2022 - Sept 2022
Software Development Engineer Intern *Seattle, WA*

- Automated a customer-facing security upgrading system as a Software Development Engineer on the Amazon Lightsail team.
- Designed, implemented, and maintained a front-end for a back-end internal API that automated security deployments for application images in JavaScript, React, and Java.
- Collaborated as a full-stack engineer of the back-end team and learned about the systematic process of test-driven-development.

Cledge Aug 2021 - Feb 2022
Research Engineer *Seattle, WA*

- Championed as the first NLP/ML engineer to be hired of a now-profitable company when Cledge was a non-profitable seed startup.
- Sponsored by Microsoft for Startups and given private beta access to OpenAI's GPT-3 language model along with 1-on-1 advising from OpenAI.
- Lead the Machine Learning infrastructure for Cledge's AI/ML operations and a team of 4 with \$25,000 worth of Azure credit from Microsoft

SKILLS

Languages	Java, Python, JavaScript, C/C++, Bash Scripting, SQL, Scala
Frameworks	PyTorch, Hugging Face Transformers, React, Pandas, Django, TensorFlow 2/Keras
Tools	SLURM, Vim, Git, Tmux, AWS Lightsail, Unix, Amazon MTurk, Virtual Machines