# Tri Pham

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#### **Education**

### Washington University in Saint Louis | Saint Louis, MO

• Ph.D. candidate in Computer Science

August 2021 – Present

#### Washington University in Saint Louis | Saint Louis, MO

• Master of Science in Computer Science

May 2024

### The University of Kansas | Lawrence, KS

• Bachelor of Science in Computer Science & Minor in Mathematics

May 2021

### **Research Experience**

#### Washington University in Saint Louis | Saint Louis, MO

Graduate Research Assistant, Advisor: Dr. Caitlin Kelleher

Spring 2022 – Present

- Developed and maintain a code capture framework that utilizes two common development environments (Visual Studio Code editor and Google Chrome web browser)
- · Conducted subsequent exploratory user studies to assess the performance of the framework
- The project *Code Stories: An Observational Study on Linking Code Influences and Changes in Code Histories* is to be submitted to The Journal of Computer Languages

### **Graz University of Technology** | Graz, Austria

Research Intern, Supervisor: Dr. Gerald Schweiger

Summer 2020

- Researched feature selection and relevant models for building energy consumption prediction
- Tested hyperparameter tuning and implemented visualization for statistical models

# **Work Experience**

### **KU School of Engineering** | Lawrence, KS

Supplemental Instructor (Intro to Machine Learning), Supervisor: Dr. David Johnson

August 2020 – May 2021

- Reviewed in-class problems, lectures, and exams before each class session
- Helped 50 students with questions about in-class problems or programming assignments

# **Projects**

# **Natural Language Processing**

Spring 2024

• Finetuned a Flan-T5-XL model from the paper *InstructBLIP: Towards General-purpose Vision-Language Models with Instruction Tuning* by broadening instruction templates to improve model response to complex natural language tasks and optimizing computational efficiency via Low-Rank Adaptation (LoRA) method

### Rapid Prototyping

Fall 2023

• Implemented a chat application where users can have conversation with other users or with a multilingual chat bot (using OpenAI API)

Data Visualization Fall 2021

• Implemented interactive data visualization for hate crime levels in the United States in recent years and visualization for sentiment progression of English fairytales

### PC Pal

Fall 2020 – Spring 2021

• Integrated Raspberry Pi 4, along with an external touch screen, to any personal computer to create different applications that control volume mixer, desktop switching, Spotify, etc.

### **Skills**

- Proficient in the use of C++, Python, and JavaScript
- Familiar with Visual Studio, PyCharm, Flask, Firebase, GitHub, and Git