Truong Pham

(469) 493-6178 | fanquantrun@gmail.com | truongpham99 | truongpham99

Education

University of Texas at Dallas — *Richardson, TX*

PhD in Computer Science — *2022-present*

Received Teaching Assistantship Award

Illinois Institute of Technology — *Chicago, IL*

BS in Computer Science - Minor in Statistics — *2017-2022*

GPA: 3.87/4.0 - Graduated Summa Cum Laude

Skills

Languages Python, C, Javascript, SQL, LaTex, Java

Frameworks Flask, PyTorch, React Native, Git

Experience

VNG — *Hanoi, Vietnam*

AI Research & Development Intern — *May - Aug. 2019*

- Created a pipeline to read densely worded street ads. The word signs were captured by a finetuned EAST model on Vietnamese street ad fonts with mAP score of 0.67. The extracted words were then passed to a finetuned Attention-based OCR. Created scripts to collect and annotate the pictures through Google Image search engine.

Illinois Institute of Technology — *Chicago, IL*

Laboratory Teaching Assistant - System Programming — *Jan - May. 2019, Sept. 2019 - Dec. 2019*

- Taught a section of 40+ students on basic concepts of Operating System like Paging, Signaling, Lock, etc.
- Introduced students to command line tools like Tmux, Vim, GDB, etc.

Research

Differentially Private Probabilistic Databases — *Dr. Yuan Hong - IIT*

Research Assistant — *Fall 2021*

- This is the first attempt in literature to implement Differential Privacy in Probabilistic Databases. Formulated a general Privacy Bound for arbitrary Privacy Mechanisms on noisy data using DKW-M inequality. Precisely derived the Privacy Budget for Gaussian Mechanism on noisy data.

Bias in Disinformation — *Dr. Kai Shu - IIT*

Research Assistant - Dr.Kai Shu — *Spring 2021*

- Investigates how information is manipulated by finding information bias in fake news. Extracted word semantics using word2vec algorithm and comparing them using the WEAT algorithm. Found significant bias regarding to health and vaccination content on fake news. This information can be used to detect misinformation.

Projects

DrugTest

- An Android app built on React Native framework that recognizes drug users through pictures. The app asks for a portrait of the user and passes it to a pipeline running on Flask server. To recognize the drug user, the features of their faces are extracted using OpenCV and then classified by a Deep Learning model. The model is finetuned using a Tensorflow's pretrained model.

MoodPal

- A Chrome extension that tracks user's emotion through their social media statuses (with their permissions). If the user is feeling low, a cat video will automatically pop up to improve their moods. The backend was a Flask server that houses a model which yields predictions to be picked up by the extension. The extension constantly sends social media statuses to the model. The finetuned LSTM model on Tensorflow predicts the mood of the user with 90% accuracy.

Fake News Detector App

- An Android app that lets people check for misinformation using Artificial Intelligence. The user can copy the link to the article that they want to fact check into the app and that information will be processed by a Flask server, which hosts the fake news AI model. There is also a panel of news from trustworthy sources for the convenience of the users.