CLIVE UNGER

clive.unger@utexas.edu | (254) 722-1897 | cliveunger.github.io

EDUCATION

The University of Texas at Austin B.S., Electrical and Computer Engineering **May 2020**
Minor: Business Foundations
GPA: 3.80/4.00

Coursework Data Science, Image/Video Processing, Distributed Systems, Algorithms, Mathematical Statistics
Skills Python, TensorFlow, Java, Scala, Apache Spark, Apache Kafka, Perl, C/C++, SQL

EXPERIENCE

NVIDIA – *Software Engineering Intern; Austin, TX* Summer 2020

- Improved deep learning test suite for the XLA optimizing compiler for TensorFlow
- Migrated entire XLA test repository to TensorFlow 2, enabling improved development for compiler team
- Wrote scripts to automate training/inference benchmarks in GitLab continuous integration environment
- Refactored pipeline diff tool to eliminate code redundancies and enhance reusability

Capital One – *Software Engineering Intern, Machine Learning; Mclean, VA* Summer 2019

- Developed a real-time data pipeline using Spark to produce nodes and edges from AWS data which fed into a community detection algorithm to identify unauthorized production changes
- Updated AWS CloudTrail parser to utilize a new streaming architecture built around Apache Kafka
- Collaborated with Streaming Data team to fix data serialization issues when writing to Elasticsearch
- Simplified pipeline by consolidating multiple Spark jobs into one, alleviating need for AWS resources

NXP Semiconductors – *Software Engineering Intern; Austin, TX* Summer 2018

- Developed data analysis tool in Perl to extract and organize metric data from automation logs
- Improved data collection accuracy by 20% by identifying critical bugs in the automation flow
- Automated the generation of reports for performance analysis and status updates of batch jobs

PROJECTS

GAN Latent Space Steering Abstract Videos – *Video Processing Class Project* Spring 2020

- Designed a process to create "abstract" representations of a video by steering the latent space of BigGAN
- Applied image recognition model to each frame of video to create a class vector and sampled the frame to create a latent vector that would then be fed into BigGAN producing an artificial video from the source
- Voted second best project of entire class

Venmo Usage Analysis – *UT Computational Media Lab* Fall 2019

- Researched the network properties of 341M public Venmo transactions and how they changed over time
- Created workflow to best utilize limited resources on UT HPC to perform large scale data analysis on Spark

Kaggle: Class Competition – *Data Science Class* Fall 2018

- Applied feature engineering methods such as normalization, dropping noisy columns, and oversampling
- Built a stacked classifier from multiple models such as Random Forest, Logistic Regression and XGBoost
- Placed 6th overall with a ROCAUC score of 0.91761 and received highest grade based on report

LEADERSHIP & HONORS

Texas Iron Spikes – *External Vice President, Administrative Officer* Fall 2017 – Spring 2020

- Streamlined merchandizing process for organization; saved 5% of annual budget
- Assisted in raising over $35,000 for the Special Olympics of Texas through multiple service events

Unrestricted Endowed Presidential Scholarship – Merit-based award nominated by faculty Fall 2018/2019
Eta Kappa Nu (HKN) – Electrical Engineering Honor Society Spring 2018 – Spring 2020