THAI HUYNH

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EDUCATION

Northeastern University, Boston, MA
Master of Science in Computer Science, GPA: 3.7/4.0 Expected Graduation: May 2022
Relevant coursework: Large-Scale Parallel Data Processing, Human-centered Machine Learning, Natural Language Processing, Data Structures and Algorithms, Foundations of Software Engineering, Database Management, Object-Oriented Design

Bachelor of Science in Mechanical Engineering, GPA 3.3/4.0 May 2016

TECHNICAL SKILLS

Languages: Python (Proficient), SQL(Proficient), Java, R, C, C++, Scala
Frameworks: Tensorflow, PyTorch, Pandas; Apache-Spark, Hadoop
Tools: AWS**,** Visual Studio, MSSQL Server, SSIS, Conda, GitHub, GitLab, MySQL, RStudio

EXPERIENCE

Mentor Collective, Boston, MA January 2020 - Present
Student Mentor
- Provide mentorship, academic and professional insights for students, and set them up for success in the MSCS program

Dell Technologies, Round Rock, TX(Remote) May 2021 – November 2021
Data Science Intern
- Manipulated historical data, built deep learning models to provide smarter recommendations and improve user's experience
  - Pooled time series data to construct in-session and full user historical data sequence to build foundational features
  - Repurposed and optimized internal legacy NLP model to build new feature, based on user search query
  - Improved training performance by repurposing custom, fast data loader open-source code
  - Built proof of concept RNN models on historical data and show case deep learning performance to stake-holders
  - Supported the development of multimodal TensorFlow engine for real-time deployment

Nordson EFD, East Providence, RI January 2019 - July 2019
Mechanical Engineer, New Product Development
- Assisted in a cross-discipline team effort to redesign our main jet dispensing valve to improve control and consistency

Xeros Technologies, Providence, RI January 2017 - November 2018
Mechanical Engineer, New Product Development
- Redesigned legacy machine, in a cross-discipline team effort, conversed controls and to improve max load capacity by 44%

RESEARCH

Government form non-binary gender discrimination analysis Spring 2022
- Utilized data mined from state level government, DMV and health department to:
  - Investigate support for non-binary declaration on forms, with respect to given jurisdiction, using statistical methods
  - Discover trends per US regions, time periods wrt presidential election results, for political affiliation spectrum analysis

PROJECTS

Bibliography Parsing for Pfizer Spring 2022
- In a team effort, developed a custom reference parser with combined rule based and machine learning methods
- Constructed ground truth from PubMed's library, formatted and realistic references from articles for model testing

Financial Market Sentiment Analysis Model [Python] Spring 2021
- Developed models using the top news headlines as feature and DJIA movement as label to predict future market price
- Experimented with traditional NLP methods arriving at 5.6% competitive edge, 0.697 F1 score using trigram Naïve Bayes

Online learning early warning system [Python] Spring 2021
- Trained a model using student demographics and engagement as features and course grades as label to predict pass/fail
- Provided model's visual interpretation in the prediction process using LIME, and counterfactual explanation via DiCE

Multiracial Recidivism Model [Python] Spring 2021
- Developed a DL model using offender background as features and reoffending charges as labels to predict recidivism
- Achieved model accuracy of 70%, variations less than 3% and mathematical fairness of less than 2% across all ethnicities

Collaborative Paint Application [C++] Fall 2020
- Applied design patterns and OOP paradigm, and followed an Agile methodology to develop a collaborative paint app
- Developed GUI with tools from SFML to enhance usability namely interactions using both keyboard and mouse input