Trang Nguyen

426 Escuela Ave, Mountain View, CA 94040

📞 404-789-0713 ✉ tn598187@gmail.com 🔗 linkedin.com/in/trang-nguyenn 🌐 trang-nguyenn.github.io

Summary

I am a CS PhD student with research experience in Time Series Classification and Explainable AI. Experienced building AI products for FinTech and Transportation companies in US and Asia. A versatile team player and problem solver with passion for continuous learning and development.

Education

University College Dublin, Ireland — 09/2019 - 05/2024
Ph.D., Computer Science *(expected)*
- **Research areas**: Time Series & Sequential Learning, Algorithm Trust, Safety & Fairness, Automated Reasoning, Explainable AI, Robustness System

Arizona State University, Tempe, AZ — 08/2016 - 05/2018
Dual Degree M.B.A. and M.Sc., Business Analytics
- **Main Courses**: Statistics, Database Systems Concept & Design, Data Mining I&II, Marketing Analytics

Nanyang Technological University, Singapore — 08/2008 - 05/2012
B.Sc., Maritime Studies (Commerce & International Trade)

Technical Skills

Programming	Python, R	**Database**	MySQL, PostgreSQL
Big Data	PySpark 2.1	**Software**	Tableau, Redash, LaTeX
Packages	TensorFlow, Keras, PyTorch, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Git		

Experience

SFI Centre for Research Training in Machine Learning, Ireland — 01/2020 - 05/2024
Doctoral Student *(expected)*
- **Algorithm Trust, Safety & Fairness**: Propose a framework to quantitatively evaluate state-of-the-art methods explaining black-box algorithms; Open-source the software for research community.
- **Automated Reasoning**: Propose a new, reliable, optimized method to explain black-box classifiers for sequential & time series data, enabling automatic knowledge discovery in data.
- **Scalable & High Performance Sequential Learner**: Research on methodology to make sequential classification faster while maintaining performance of highest available method.
- **Teaching Assistant**: Data Analytics, Machine Learning, Big Data Programming, Relational Database & SQL Programming

Trusting Social Ltd., Vietnam — 08/2018 - 06/2019
Data Scientist
- **Credit Score Modeling using Mobile Data**: Researched and Optimized performance of Credit Score model for 60+ million of unbanked customers using Python and PySpark; Proposed and Engineered new features; Tuned model hyperparameters, achieving 30% increase in Gini of back-testing datasets.
- **Data Quality Monitoring**: Automated quality monitoring workflow on 100+ TB of data with real-time dashboard using Redash and mySQL on AWS, improving reliability and saving 10+ hours weekly for analytics team.

FedEx Corporation, Memphis, TN — 01/2018-05/2018
Data Science Intern (MSc Business Analytics Capstone)
- **Data Product Conceptualization**: Proposed the idea of combining machine learning techniques and time series analysis to predict transportation need, enabling time savings and reducing manual budgeting efforts.
- **Building production-ready data product**: Gathered, cleaned, analyzed, engineered features from multiple sources, Built predictive model, achieving Mean Absolute Percent Error (MAPE) of under 5% on 3-month data test data.

Shun Shing Group Intl., Singapore — 09/2012 - 06/2016
Senior Pricing Analyst, Bulk Commodity Transportation
- **Features Analysis & Hypothesis testing**: Designed experiments to diagnose features driving contract pricing; Performed testing of independent variables to confirm statistical significance.
- **Leadership**: Led a market research analyst team to analyze, predict, and offer future prices to commodity traders.

Publications

- **Nguyen T.T.**, Le Nguyen T., Ifrim G. (2020) *A Model-Agnostic Approach to Quantifying the Informativeness of Explanation Methods for Time Series Classification*. In: ECML Workshop 2020. Published in conference proceedings and part of Lecture Notes in Computer Science, vol 12588 (Springer, Cham). https://doi.org/10.1007/978-3-030-65742-0_6
- Agarwal S.*, **Nguyen T.T.***, Le Nguyen T., Ifrim G. (2021) *Ranking by Aggregating Referees: Evaluating the Informativeness of Explanation Methods for Time Series Classification*. In: ECML Workshop 2021. Published in conference proceedings and part of Lecture Notes in Computer Science, vol 13114 (Springer, Cham). https://doi.org/10.1007/978-3-030-91445-5_1