Enrico Laoh, *PhD(cand.)*

https://www.linkedin.com/in/laohenrico/ | https://elaoh.github.io/
(909) 701 3862 | elaoh@okstate.edu

Educations and Certifications

- **Doctor of Philosophy**, *Industrial Engineering and Management*, Oklahoma State University, Expected 07/2025
- **Master of Science**, *Industrial Engineering and Management*, Oklahoma State University, GPA 4.00/4.00
- **Graduate Certificate**, *Business Analytics and Data Science*, Oklahoma State University, GPA 4.00/4.00

Certifications: *Tableau Desktop Specialist*, *Amazon SageMaker Studio*, *Amazon Redshift*, *AWS MLOps*, *Six Sigma Green Belt*, *Supply Chain Design*

Experiences

APPLIED MACHINE LEARNING TECHNOLOGY FOR TIME SERIES DATA — JUN - AUG 2025

Advanced Demand Forecasting Model for Airline Industry (*United Airlines, Inc.*)

- Observing the pricing model and understanding the effect of demand forecasting for different products.
- Updating the demand forecasting model and testing novel variables extracted from internal databases and external potential influences.
- Successfully reduced the forecasting MAPE by ~2%.

Skills: ***Databases, SQL, Statistical Learning, Visualization and Storytelling, Business Analytics, Customer Segmentation, Product Analytics, Time Series Analysis***

HIGH-STAKE DECISION SUPPORT SYSTEM — JAN 2021 - NOW

Collaborative AI for a Robust Predictive Model (*Oklahoma State University*)

- Developing machine learning models incorporating trust issues for risk-sensitive decision-making.
- Implementing a collaborative AI approach to increase the performance while validating the prediction.
- Designing a continuous human and AI learning framework.
- Testing the model's robustness over different data sets.
- Funded by NIH under a $ 1.2M research grant (*PI: Dr. Liu, MIT '05*)

Skills: ***Data-driven Decision Making, Data Wrangling, Machine Learning, Incremental Learning, Continuous Learning, Transfer Learning, Time Series Analysis, Bayesian Analysis, Interpretable and Explainable AI***

ADVANCED STATISTICAL METHODS AND EXPERIMENTAL DESIGN — AUG 2017 – DEC 2020

Transformative Big Data Insight for Industrial Advancement (*University of Indonesia*)

- Designed and implemented experimental research on customer segmentation using advanced clustering methods, demonstrating a solid understanding of statistical methodologies.
- Conducted sentiment analysis on tourism-related data, effectively extracting and communicating actionable insights to drive business decisions.
- Utilized data visualization techniques in multiple studies, implying proficiency with dashboarding tools to present complex data clearly.

Skills: ***Large Language Modelling (LLM), Text Mining, Spatial Analysis, Lifetime Value Analysis, Customer Clustering, Sampling Methods, Design of Experiment***

Selected Awards

- **Roy and Virginia Dorrough Distinguished Graduate Fellowship, Oklahoma State University, 2023, 2024, 2025,** *Awarded to recognize outstanding graduate students with evidence of exceptional academic performance and achievements, leadership experiences, and notable extracurricular or community engagement activity.*
- **Lisa Zaken Award for Excellence, Institute of Industrial and Systems Engineers, 2024,** *This international annual award, given only to one winner who has outstanding scholastic achievement, leadership, and dedication to the Industrial and Systems Engineering profession, demonstrates the highest of standards.*
- **President Leadership Recognition, Hargis Leadership Institute, 2024,** *Awarded for demonstrating exemplary leadership and impact within the university and broader community.*
- **Outstanding Graduate Student Award, CEAT, Oklahoma State University, 2024,** *Selected as the top graduate student in the CEAT based on academic excellence and research achievements.*
- **Robberson Dissertation Fellowship, Oklahoma State University, 2024,** *Recognized for outstanding doctoral research contributing to advancements in industrial engineering and data science.*