ERIC B. ZHOU

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U.S. Citizen

Education

Expected 2021 — **Carnegie Mellon University Tepper School of Business** — Pittsburgh, PA
Master of Business Administration, *Business Analytics Track*
Concentrations in *Business Technology* and *Operations Research*
GPA: 3.88/4.00

2014 – 2018 — **Washington University in St. Louis Olin Business School** — St. Louis, MO
Bachelor of Science in Business Administration
Majors in *Finance* and *Marketing*
GPA: 3.69/4.00

Research Interests

Human-computer collaboration for decision making
Design and evaluation of human-AI collaborative systems
Social and economic impacts of AI
Human-AI systems for creativity and innovation

Working Papers

Lee, Dokyun; **Zhou, Eric**; Mao, Chengfeng; Kane, Gerald. "Interpretable Machine Learning For Theory Building: Human-AI Collaboration." *Accepted to MISQ Author Workshop. Submitted to MISQ for initial review.*

"Recent advances in Interpretable Machine Learning (IML) offer flexible, scalable solutions to help humans develop novel hypotheses, especially with large volumes of unstructured data. We demonstrate by applying a novel IML algorithm to three datasets and reproduce theoretical insights from published research with minimal time and human intervention."

Research Experience

Present — **Graduate Research Assistant** at Carnegie Mellon University — Pittsburgh, PA
Advisor: Dokyun Lee

- Applied novel Deep Learning algorithm Focused Concept Miner (FCM) on unstructured data to reproduce theoretical insights published in leading journals.
- Created FCM user guide and demonstration, serving as liaison with faculty alpha/beta testers (Github link).
- Prepared course material for *Deep Learning for Business: Mining Unstructured Data*, covering technical details on neural language models like Transformer, BERT, and GPT1, 2, & 3.

Summer 2016 — **Undergraduate Research Assistant** at Washington University in St. Louis — St. Louis, MO
Advisor: David Meyer

- Performed web scraping to obtain data on job mobility trends among global investment banks.
- Created career timelines of investment banking executives to trace global talent movement in the industry.
- Qualitatively analyzed job mobility within banking network to identify hubs that facilitate talent exchange.

Industry Experience

2018 - 2019 — **Market Research Analyst** at Nielsen BASES — Wilton, CT
Product Innovation Analytics

- Designed and conducted research plans to evaluate new product concepts.
- Analyzed correlation between product innovations and in-market success to determine innovation and market entry strategy for consumer goods companies.
- Co-led initiative to develop predictive model that forecasts incremental brand value of new innovations.

Summer 2017 — **Business Development Intern** at Missouri Historical Society — St. Louis, MO

- Managed nationwide outreach with other cultural institutions to form a reciprocal benefits network.

- Conducted market research to evaluate member engagement and alternative membership models.

Summer 2015 | **Information Technology Intern** at Merck | Beijing, CN

- Built framework for UI and backend database using SharePoint for a site-wide resource management tool.
- Framework later implemented by the IT team to optimize resource allocation across 300 employees.

Skills

Computer
Proficient:Python, R, SQL, Excel, LaTeX
Basic:Java, Tableau, AIMMS, Gurobi, Julia

Language
English: Native
Mandarin: Proficient
French: Proficient

Relevant Coursework

Official Coursework

Mathematics & Statistics
Statistical Decision Making
Probability & Statistics
Matrix Algebra
Calculus III

Computer Science & Analytics
Applied Machine Learning
(PhD) Economining: Neural Language & Generative Models
Applications of Operations Research
Modern Data Management
Optimization
Data Structures & Algorithms
Computer Science I

Independent Study

Mathematics & Statistics
Mathematics for Machine Learning
MIT OCW Linear Algebra

Computer Science & Analytics
NLP with PyTorch
CMU CS Introduction to Machine Learning
Neural Network Methods for NLP
Deep Learning with Python/PyTorch
Hands-On Machine Learning with Scikit-Learn & Tensor Flow
MIT OCW Introduction to CS & Programming

Honors & Awards

May 2019	Tepper School of Business merit-based scholarship
Feb. 2019	Nielsen BASES Client Service Superstar Award
Nov. 2014	2nd place, Olin Foundations of Business Product Design Competition
May 2014	Olin Business School merit-based scholarship
May 2014	Xerox Award for Innovation & Information Technology
June 2013	1st place in nation, Database Design & Applications at FBLA National Leadership Conference

Activities

Dance Instructor for CMU KPDC - Carnegie Mellon University
Dancer for KASA Dance - Carnegie Mellon University
Dancer for Dancers' Symposium – Carnegie Mellon University
Executive board member, videographer, dance instructor for PL4Y Dance - Washington University in St. Louis