Edward Chen

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Experience

Senior Data Scientist - USAA July 2017 — Current

- Key contributor to USAA FSB's first ever machine learning custom behavior model for credit card, built using lightGBM in Python
- Developed framework for translating unintelligible machine learning points allocation to explainable customer adverse action reasons for credit card accounts using Shapley values in Python
- Designed framework for identifying Buy Now, Pay Later user spending during the COVID pandemic by writing multipurpose SAS code that classified vendor type and usage for individual credit card transactions
- Created several large-scale credit card models for various bank risk demands with additional ad hoc analysis for existing bank credit initiatives with various regression methods and decision trees in SAS and Python
- Maintained data monitoring, reporting, and data visualizations of over 20 bank custom and vendor models from Snowflake databases at monthly and quarterly frequencies for over 2 years using SAS and SQL

Education

University of Illinois - Urbana-Champaign - College of Engineering Jan 2024 – Present

- M.S. in Computer Science — 4.0 GPA
- Selected Coursework — Applied Machine Learning, Data Visualization, Text Information Systems

Texas A&M University - College of Arts and Sciences Aug 2021

- M.S. in Statistics — 4.0 GPA
- Selected Coursework — Advanced Programming with SAS, Applied Analytics, Applied Bayesian Methods, Applied Categorical Analysis, Regression, Methods of Statistics I/II, Sampling

Cornell University - College of Arts and Sciences May 2017

- B.A. in Mathematics and Economics — 3.7 GPA, Dean's List 3 Semesters
- Selected Coursework — Honors Real Analysis I/II, Multivariable Calculus, Linear Algebra I/II, Microeconomics (Graduate Level), Econometrics

Projects

Challenge Assistant - Pokemon Spring 2024

- Predictive programs for opponent AI movesets for post-game battle challenges in Pokemon handheld games generations 4–6 using pandas and numpy

Narrative Visualization - UIUC CS 416 Summer 2024

- Created a visualization using javascript and html to analyze the effect of 3-point shooting on NBA team success

Skills

- **Languages:** Java, Python, C, Javascript
- **Software:** SAS, SQL, Snowflake, Tableau, R, LaTeX
- **Interests:** Basketball, soccer, football, cooking