Ming (Simon) Zhu

| simonzhu233@gmail.com | 978-270-5501| linkedin.com/in/mingzhu97 | github.com/simonzhu97 |

EDUCATION

Northwestern University   **Evanston, IL**
Master of Science in Analytics   *Sept 2021 – Dec 2022*
Cumulative GPA: 4.0 / 4.0

University of Virginia   **Charlottesville, VA**
Bachelor of Science in Commerce, Concentration in Finance and IT, Second Major in Computer Science
Cumulative GPA: 3.95 / 4.00 - Graduated with Distinction   *Aug 2017 – May 2021*

- **Programming Skills:** (Advanced) Python, R, SQL, Java, C++
- **ML Toolkits:** pandas, scikit-learn, PyTorch, Tensorflow, Spark, Apache Airflow, Docker, nltk
- **Visualization Toolkits:** Matplotlib, Seaborn, Streamlit, Tableau, PowerBI
- **Relevant Coursework:** Machine Learning, Deep Learning, Data Mining, Information Retrieval, Big Data Analytics

PROFESSIONAL EXPERIENCE

Deloitte Consulting LLC.   **Chicago, IL**
Applied AI Analyst   *Apr 2023 – Present*
- Led root cause analysis, identifying regression factors for 5G adoption rate; proposed actionable solutions
- Optimized data pipeline for a cell tower coverage metric with JS test, achieving a 40% runtime reduction

Northwestern University (Deep Learning Lab)   **Evanston, IL**
Lab Assistant   *Dec 2022 – Mar 2023*
- Developed backend MySQL database and frontend Streamlit dashboards for manufacturing metrics monitoring
- Enhanced model explainability with gradient-based saliency maps in deep reinforcement learning algorithms

Meta Platforms, Inc. (Remote Presence - Instagram)   **Menlo Park, CA**
Data Scientist Intern   *Jun 2022 – Sept 2022*
- Analyzed Instagram conversation and calling data with SQL to identify a 72K DAU opportunity
- Affirmed team roadmap via visual analytics of calling catalysts and audience
- Drove Instagram creator account engagement with innovative use cases for calling
- Spearheaded synchronous communication pattern analysis with cross-functional teams, earning leadership endorsement

Marani Health   **Evanston, IL**
Student Data Scientist   *Sept 2021 – May 2022*
- Implemented various machine learning frameworks to predict unscheduled C-sections, enhancing precision by 26% and recall by 35%.
- Crafted features by leveraging techniques such as Empirical Mode Decomposition, tsfresh, Gaussian Processes, and subsequent analytical evaluations
- Presented modeling insights to influence C-suite strategy; model adopted for future iterations

CMG Partners LLC.   **Washington, D.C**
Summer Associate   *Jun 2020 – Aug 2020*
- Applied discrete choice model to understand market preferences and enhance pricing strategies, elevating revenue by 65%
- Forecasted a five-year revenue stream based on enhanced pricing strategies to influence board-level strategies
- Automated outbound marketing target sourcing with a Python web-scraper, adding 108 potential clients

TECHNOLOGY-RELEVANT PROJECTS

Spotify Anime Music Recommender   **Evanston, IL**
Project Leader   *Jan 2022 – June 2022*
- Clustered Spotify anime songs with Gaussian Mixture models to reach silhouette score of 0.7
- Orchestrated an AWS-powered (RDS, S3) end-to-end data pipeline
- Developed a web recommender with HTML frontend and a dockerized Python Flask backend

Study Celebrity Faces with Computer Vision   **Evanston, IL**
Project Leader   *Jan 2022 – June 2022*
- Built CNN models via Keras to classify smiling faces with an accuracy of 91.6%
- Employed transfer learning using VGG19 and other models for classification on AWS Sagemaker
- Designed a user interface for real-time smiling classification; demo acknowledged by professors