Michael O. Guel

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EDUCATION

Michigan State University, College of Natural Science	**East Lansing, MI**
Master of Science in Data Science, GPA: 3.94/4.00	May 2025 (Expected)
Michigan State University, Broad College of Business	**East Lansing, MI**
Master of Science in Business Data Science and Analytics, GPA: 3.96/4.00	Dec 2022
Michigan State University, College of Social Science	**East Lansing, MI**
Bachelor of Arts in Economics, Minor in Social Science Quantitative Data Analytics	Dec 2020

WORK EXPERIENCE

DataAnnotation	**(Remote) Howell, MI**
AI Training (Contract)	May 2024 – Present

- Designed prompts to challenge LLMs in math, coding, ML, and data analysis; engineered adversarial prompts to induce errors and refine model behavior; revised responses for accuracy, efficiency, and guideline adherence; created coded solutions tailored to prompts, enhancing AI training

North American Bancard	**Troy, MI**
Data Science Intern	May 2024 – Aug 2024

- Built a Python-based standalone application for on-demand team member metric tracking, report generation, and data search with Snowflake integration; streamlined data manipulation and transformation, enabling leadership to generate reports in seconds instead of hours
- Executed an in-depth analysis of underwriting escalation tickets, leveraging IP geolocation for validation, association mining for underwriting rules, and Sigma BI for dashboard development; automated weekly reporting in Airflow, reducing ticket volume by 35%
- Led automation efforts in a high-stakes, time-sensitive merchant fraud case, accelerating completion from three months to three weeks, achieving 85% loss recovery to date, and easing team workload

Michigan Automotive Group	**Brighton, MI**
Sales Analyst	Jan 2022 – May 2024

- Retrieved and preprocessed raw data from CRM, conducted data analysis, and established KPIs for the sales force; defined new metric expectations, boosting and sustaining sales month-over-month by 15%
- Developed a Python-based mass email automation tool (MIME, smtplib), launching segmented marketing campaigns and driving a 10% month-over-month sales increase
- Orchestrated the entire sales cycle, overseeing lead coordination, appointments, documentation, test drives, and initial verbal commitments; doubled and sustained salesperson performance while optimizing the sales process

PROJECTS

Michigan State University, Research Project	**East Lansing, MI**
Computer Vision (Emotion Recognition)	Dec 2024

- Engineered a real-time facial analysis model for emotion, age, and ethnicity recognition using Multi-Task Learning and Multi-Task Cascaded Convolutional Networks based face detection pipeline
- Created and developed a Swift-based iOS application, integrating the model with CoreML for stable, real-time emotion, age, and ethnicity prediction on-device

Michigan State University, Optimization Project	**East Lansing, MI**
Deep Learning (Sequence Arithmetic)	Dec 2024

- Engineered a CNN-Transformer hybrid model with attention pooling to predict sums of randomly ordered MNIST digit sequences (lengths: 20, 50, 100), achieving R^2 ~0.90 and demonstrating strong generalization across sequence lengths; implemented Curriculum Learning for progressive training and improved convergence
- Designed a custom dataset pipeline to dynamically construct sequences, normalize targets, and enable flexible evaluation; created a real-time arithmetic evaluation script for dynamic sequence selection and user input

Textron Aviation, Corporate Partnership	**East Lansing, MI**
Machine Learning (Demand Forecasting)	May 2022

- Identified trends through meticulous EDA, developed time series model capturing key lag dependencies to generate a twelve-month sales forecast, achieving 83% accuracy (outperforming internal model); communicated deliverables to C-suite, resulting in model adoption and supply chain planning insights

SKILLS

R, Python, SQL, MongoDB, Tableau, Sigma BI, Power BI, Snowflake, Airflow, TensorFlow, Pytorch, Keras, StreamLit