MARTIN WEISS

martinweiss1255@gmail.com | (240) 506 - 0765 | LinkedIn | Personal Website

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EDUCATION		
	Virginia Tech	Blacksburg, Virginia
	M.S. Computer Engineering	2024 - 2025
	B.S. Computer Engineering	2020 - 2024
	Major: Machine Learning	GPA: 3.45

PROFESSIONAL EXPERIENCE

Thermo Fisher Scientific - Clinical Next-Generation Sequencing Guilford, CT
Senior Data Science Intern May 2024 – August 2024

Fine-tuned Google's FLAN-T5 LLM to process sequencing error messages into dictionaries
Developed models using PyTorch to predict 2D histograms using sequencing run metadata
Achieved >99% accuracy in identifying the 0.25% of sequencing runs that were aberrant
Integrated trained models into the R&D tool suite using Flask, Docker, and Ubuntu
Delivered robust ML solutions used by multiple R&D teams for enhanced troubleshooting

Thermo Fisher Scientific - Immunodiagnostics Kalamazoo, MI
Data Science Intern May 2023 – August 2023

Led a data-driven targeting initiative for a diagnostic test within the ImmunoDiagnostics Division
Leveraged machine learning models to identify key test utilization drivers among physician segments
Engineered intricate targeting algorithms that align with business objectives for demand generation
Delivered enhanced targets based on physician test utilization and account growth opportunity
Devised precision targeting plan, endorsed by corporate international leadership, launched in Q1 2024

Municipal Securities Rulemaking Board Washington, D.C.
Data Science Intern May 2022 – July 2022

Developed machine learning solutions to analyze and predict bond report filing times
Worked with enterprise-scale data sets to find unique and actionable insights with Python
Created compelling data visualizations and graphs that promoted explainability and interpretability

TECHNICAL SKILLS

Python	AWS	Docker	SQL
R	Git	Jupyter	Microsoft Office Suite

PERSONAL PROJECTS

AWS Based Spotify Stats February 2024

Developed AWS-based solution for showcasing my top tracks and artists from Spotify
Automated logging of my recent streaming data using the Spotify API to S3 every 30 minutes
Utilized daily Lambda functions triggered by EventBridge to update top tracks and artists
Stored top tracks and artists in optimized DynamoDB tables for fast retrieval on my website
Implemented visual indicators such as green arrows to visually highlight track and artist changes

Spotify Machine Learning Song Recommendation Engine October 2022

Python data science project utilizing Pandas to clean and tabulate nearly 500,000 streams
Counted total streams for each unique song, totaling nearly 5,000 unique songs
Used the Spotify API to retrieve song data for my songs and 55,000 others for training and testing
Developed a decision tree algorithm that suggested new songs based on my top streamed songs