Sean Villoresi

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Education

Duke University Durham, NC

Bachelor of Science in Computer Science and Statistics, Concentration in AI and ML *Aug. 2021 – May 2025*

- GPA: 3.87
- Relevant coursework: Multivariable Calculus, Discrete Mathematics, Probability, Artificial Intelligence, Design and Analysis of Algorithms, Linear Algebra, Computer Architecture, Economic Principles, Practical Financial Markets

Delbarton Morristown, NJ

High School Degree *Aug. 2017 – May 2021*

- ACT: 36

Experience

Business Analyst Intern Summer 2024

Wayfair *Boston, MA*

- Enhanced the Weekly Commercial Business Report to offer increased visibility into outbound sales, categorical breakdowns, and European KPIs, strengthening decision making capabilities for upper level management
- Constructed a set of comprehensive SQL queries and a subsequent dashboard for Sales trainers to track 8 key metrics of new hire performance, optimizing training programs on individual and cohort levels

Data Analyst Intern Summer 2023

Ampla *New York, NY*

- Engaged in a range of projects, from predictive modeling using machine learning to help with underwriting, to streamlining and enhancing data categorization by updating industry tags, rectifying over 125k accounts with non-standard industry classifications, and enhancing data consistency
- Spearheaded the creation and standardization of BDR performance reports and dashboards, facilitating easy access to insights and enabling tracking of BDR metrics across all stages of the sales process

Data Analyst Intern Spring 2022

Invisibly *St Louis, MO*

- Assisted smaller companies in improving their data collecting capabilities and implementations as it relates to their advertising campaigns through analyzing ad performance, seeing over a 3x increase in interactions
- Uploaded content to the company's app using Postman API, and monitored performance by article category to influence the algorithmic layout of content in the app

Projects

Pitch Prediction | *Python, Scikit-Learn, Github, Jupyter, PyBaseball* Spring 2024

- Developed a machine learning model to predict pitch types using extensive data extraction, transofrmation and feature engineering from MLB games using Statcast
- Implemented and evaluated various algorithims (Random Forest, Gradient Boosted Trees, SVM), achieving improved accuracy over our Naive Guess

Trajectory Analysis | *Python, Java, Github, Matplotlib* Spring 2023

- Developed algorithms to both successfully and efficiently map, simplify, and compare real world trajectories
- Implemented both fd and dtw methods of determining distance, and used such methods on real-world car data in order to determine appropriate centering trajectories of 100+ paths
- Employed Matplotlib to visualize trajectories in a clean, easy to comprehend way

Analysis of Music | *R Studio, Github* Spring 2023

- Conducted comprehensive analysis on predictors of song streams, to determine key predictive factors for song success and likelihood to go viral
- Aimed to establish connections between distinct song attributes, such as energy, acoustic quality, valence, and loudness levels, and many others

Technical Skills

Languages: Java, Python, C/C++, MongoDB, R, SQL
Developer Tools: Git, Google Cloud Platform, VS Code, Salesforce, Groove, GBQ, IntelliJ, Postman API
Libraries: pandas, NumPy, Matplotlib, Scikit-Learn, Pickle