

Matthew Plambeck

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EDUCATION

The College of William & Mary

Williamsburg, VA. Expected: *May 2026*

- Intended Data Science Major & History Minor
- Current GPA: 3.77

EXPERIENCE

Aftersales Analyst Intern, PACCAR Parts

May-August 2025

- Supported the Service Management, Technical Bulletins, and Technical Publications teams through data analysis, dashboard creation, and workflow optimization.
- Built Tableau dashboards and automated Excel reports with Python, integrating SQL queries to extract data at both the dealer and service advisor levels for performance tracking and underperformance detection.
- Improved team efficiency by consolidating Kenworth and Peterbilt workflows in Smartsheet following an internal re-org. Built dashboards to provide visibility into service manual and bulletin progress.

Project Intern, Flagship RTL

August-September 2024

- Conducted research on scalable methods to rank clothing retailers' SKUs based on historical sales data. Developed Python functions to provide insights into sales data at the style and SKU levels, which were then used to categorize SKUs as A, B, or C. Transitioned the project to the data science team for implementation into Flagship's workflow.

PROJECTS

Predicting Survivability of North Atlantic Convoys from WWII

October 2023-October 2025

- Collected nearly 70,000 merchant and escort ship records via web-scraping, cleaned & verified the data using a secondary source, and then organized it by specific convoy denominations.
- Fit models to predict ship sink percentages of convoys, however, due to poor results, switched to classifiers predicting high or low risk convoys. Added features to improve classifiers and conducted feature analysis to identify leading causes in at risk convoys.
- Created visualizations of the data and authored an article on history of convoys in WWII
- Project site: <https://map9900.github.io/Modeling-WWII-Convoys.github.io>

The Convoy System of WWII: A Look into its Effectiveness Through Data Science

July-September 2023

- Used WWII era equations and simplified simulations of ships at sea to highlight some of the factors that made convoys more protective than individual ships.
- Wrote and published a short article of my findings on Medium:
<https://medium.com/@matthewplambeck99/the-convoy-system-of-wwii-a-look-into-its-effectiveness-through-data-science-6674b02227b5>

LEADERSHIP & ACTIVITIES

VP of Risk Management, Beta Theta Pi, Zeta Upsilon Chapter

September 2023-May 2025

- Lead and schedule investigations, interviews, and conduct meetings. Assist in enforcing disciplinary and rehabilitative sanctions as well as aiding in planning of chapter wide events.

Volunteer, Mercer Island Thrift Store

June-August 2024

- Expected and sorted donations while preventing a friendly environment to both donors and customers.

CERTIFICATIONS

Applied Data Science with Python (University of Michigan x Coursera)

June-August 2023

- A series of five Python courses: Introduction to Data Science, Plotting, Charting & Data Representation, Machine Learning, Text Mining, and Social Network Analysis

SKILLS

Programming: Python (NumPy, Pandas, SciPy, Scikit-learn, Matplotlib, Cartopy, PyTorch), R, SQL, HTML

Software: Git, Tableau, Smartsheet, Excel, Word, PowerPoint

Data, ML, & AI: Ensemble Methods (Random Forests, Gradient Boosting), Reinforcement Learning, Cross-Validation & Grid Search Optimization, NLP, Neural Networks (Feedforward, CNN), Survival Analysis (Cox PH, Weibull, AFT)