COLIN WARD

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DATA ANALYST & SOFTWARE DEVELOPER

EDUCATION

Wake Forest University School of Business, Winston-Salem, NC
Master of Science in Business Analytics, *May 2026*
GPA: 3.89; ***Relevant Coursework:*** Statistical Business Decision-Making, Data Storytelling, Data Management, Decision Modeling

Wake Forest University, Winston-Salem, NC
Bachelor of Science in Computer Science, Minor in Mathematics, Minor in Entrepreneurship, *May 2025*
GPA: 3.61 ***Honors:*** Dean's List; *Pi Mu Epsilon*, National Mathematics Honor Society
Relevant Coursework: Algorithm Design and Analysis, Software Engineering, Machine Learning, Mobile and Pervasive Computing, Computer Systems 1 & 2, Linear Algebra 1 & 2, Codes and Cryptography, Ethical Computer Science

AREAS OF EXPERTISE

Machine Learning | Data Analysis | Software Engineering | Problem Solving | Research & Experimentation | Feature Engineering
Technical & Business Communication | Cross-functional Collaboration | Cloud Computing | Data Visualization | Analytical Thinking
Automation & Efficiency | Team Leadership | Statistical Computing | Time Management | Model Interpretability & Evaluation
Data-Driven Decisions | Project Ownership | Agile Workflow | Strategic Thinking | Business Impact Analysis | System Design

TECHNICAL SKILLS

Programming Languages: Python, SQL, Java, C, HTML, CSS, JavaScript, C++, Racket
Machine Learning: Logistic/Linear Regression, Naïve Bayes, SVM, K-Means, Neural Network (backprop), Decision Tree, Ensemble (AdaBoost, Bagging) (Ground-up implementation with NumPy); Random Forest, XGBoost (scikit-learn)
Data Analysis & Experimental Design: Exploratory Data Analysis, Data Cleaning, Feature Engineering, Statistical Inference
Analytical Tools & Platforms: Databricks, Snowflake, MicroStrategy, MS SQL Server, Power BI, Excel, Jupyter
Cloud & Database Technologies: DynamoDB, MySQL, AWS (App Runner, Lambda, S3, IAM, EventBridge, QuickSight), GCP Colab
Software Engineering Tools: Git, VSCode, Android Studio, Cursor, Jira, Azure DevOps, Shell/Bash
Statistical & Computational Tools: Mathematica (Symbolic Computation), SageMath (Cryptography and Number Theory)

PROFESSIONAL EXPERIENCE

DIGITAL BUSINESS SOLUTIONS INTERN | **Reynolds American Inc.** | Winston-Salem, NC   *May 2024 – Aug 2024*
- Developed an equipment data model to transition Operations from a fixed system to a dynamic ad hoc reporting environment, leveraging Databricks SQL, Snowflake, and MicroStrategy to optimize data querying, aggregation, and visualization.
- Collaborated with cross-functional teams, including ETL developers, DBS Mexico Tech Hub, and plant performance/quality stakeholders at the Tobaccoville MFG plant to optimize model for specific business requirements and KPIs
- Produced and delivered a high-impact presentation to 100+ colleagues, including senior leaders and fellow interns, highlighting the project's strategic value and business implications. Provided detailed project documentation for future use

IT INTERN | **Easton Utilities** | Easton, MD   *July 2023 – Aug 2023*
- Designed and implemented a customer analysis snapshot within customer portal; a tool to reduce issue resolution time and enhance efficiency for the Customer Service team by providing concise and useful information on any searched customer
- Created and delivered a 15-minute presentation to showcase strategic benefits of Customer Analysis to 15+ leaders
- Successfully transitioned into full-stack development by rapidly acquiring proficiency in SQL, JavaScript, and HTML

SAILING COACH | **Tred Avon Yacht Club** | Oxford, MD   *June 2021 – Aug 2022*
- Taught 100+ students of various ages and experience levels, increasing confidence and sailing ability by creating daily lesson plans of chalk talks and land/on-water drills strategically customized to target sailors' most significant weaknesses
- Coached racing team at various large regattas and developed tactics based on weather conditions, analyzed team member's on-water performance, and provided feedback to improve outcome of following races, leading to top 3 Laser racing wins

COMPETITION & LEADERSHIP EXPERIENCE

1ST PLACE TEAM LEADER | **McKinsey & Co. Case Competition** | Winston-Salem, NC   *June 2023*
- Led a 4-person team in a Wake Forest and McKinsey & Co. case competition, analyzing a real-world business problem and developing data-driven marketing strategies to improve brand visibility, reach, and placement effectiveness
- Created and presented analytical findings using empirical methods to 50+ participants, WF faculty, and McKinsey professionals

TECHNICAL PROJECT EXPERIENCE

"Meta-Learning for Coreset Selection: Identifying Optimal Techniques Across Diverse Datasets": Conducted a semester-long research project evaluating 10 coreset selection techniques across 75+ datasets from domains including finance, healthcare, and technology. Extracted dataset-level metadata (e.g., dimensionality, class imbalance, redundancy) to train a meta-model that predicts the most effective coreset strategy for a given dataset. Built and tuned Decision Tree and Random Forest models using custom-engineered features. Evaluation metrics were recorded separately for post-hoc analysis and pattern discovery.

Personal Portfolio Website: Designed and deployed a portfolio showcasing selected projects. View GitHub repositories and detailed write-ups for all projects at: colinward77.github.io