

# NICKOLAS BARTLE

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## DATA ANALYST

### EDUCATION

**Wake Forest University School of Business**, Winston-Salem, NC

Master of Science in Business Analytics, May 2026

**Honors & Activities:** Wake Forest Baseball Team Graduate Analyst and Statistician

**University of Alabama**, Tuscaloosa, AL

Bachelor of Science in Commerce & Business Administration focused in Management Information Systems, December 2024

**Honors & Activities:** Alabama Information Management Society (AIMS), UA Data Analytics Club, Phi Sigma Kappa

### AREAS OF EXPERTISE

Leadership | Problem-Solving | Technical Consulting | Business Communication | Time Management | Software Engineering | Gen AI  
Data Visualization | Data Mining | Statistical Analysis | Machine Learning | LLM Engineering | Web Scraping | Database Management  
Feature Engineering | Experimental Design | Optimization | Data Engineering | Analytics | Time Series Analysis | Aggregated Data |  
Predictive Modeling | Quantitative Analysis | Statistical Modeling | Data Manipulation | Data Science | Data Storytelling | Web Design

### TECHNICAL SKILLS

**Programming Languages:** Python, SQL, R, C#, HTML, JavaScript, CSS, Dax, Node.js, .NET

**Predictive Modeling & Statistical Analysis:** Linear Regression, Logistic Regression, Regression Modeling, Time Series Analysis, Feature Engineering, Outlier Detection, Hyperparameter Tuning, Normalization, A/B

**Data Visualization:** Power BI, Tableau, Plotly, Matplotlib, ggplot2

**Machine Learning:** GAMs, xgBoost, Tree-Based Modeling, Confusion Matrix

**Operating Environments:** VS Code, Jupyter, R Studio, MySQL, SQLite, GitHub

### PROFESSIONAL EXPERIENCE

#### GRADUATE BASEBALL DATA ANALYST / STATISTICIAN, Wake Forest University Baseball

*Jun 2025 – Present*

- Developed four comprehensive machine learning pipelines using XGBoost gradient boosting to predict player performance metrics from ball-flight characteristics, processing 195,000+ total pitch event observations
- Delivered predictive models for swing-and-miss outcomes, ground ball tendencies, and contact quality assessment
- Generated actionable insights through pitcher performance leaderboards, delta analysis identifying over/under-performers, and comprehensive visualization analysis including correlation and feature importance plots
- Designed statistical models including log models, regression models, boosted models, and exploratory data tools

#### DATA ANALYST / INFORMATION SYSTEMS ENGINEER CO-OP, Mercedes-Benz US

*Aug 2023 – Sep 2024*

- Modified a SQL database to centralize vehicle torque data, reducing employee downtime by 20 minutes from loading data
- Led a supply chain optimization project to improve part cart space utilization between the warehouse and online production checkpoints, increasing space utilization by 25%
- Built interactive Power BI dashboards to analyze plant-wide manpower data, enabling data-driven staffing decisions that improved on-line team performance and reduced daily faults by 4.6 per station
- Constructed a custom Python solution to scrape scheduling data and generate 3 interactive predictive performance models, comparing outcomes across 2 proposed plant schedules

#### BASEBALL DATA ANALYST / STATISTICIAN, University of Alabama Baseball Team

*Sep 2022 – Apr 2023*

- Designed a Python codebase with Plotly and Matplotlib libraries to manipulate large amounts of data and visualize effectively
- Used shiny apps to construct detailed scouting reports for SEC play and other leagues when needed
- Reviewed SQL databases for data processing at conclusion of games ensuring proper storage and organization

### ANALYTICAL PROJECT EXPERIENCE

**Senior Database Capstone Project:** Leveraged Python, JavaScript, and HTML codebase to update client's front-end functionality with new features including class registration forms, attendance records, and creating admin/student logins for the webpage. Rebuilt and optimized SQL databases and data connections to securely store and update client service records for an online learning platform (OTIDE), improving data accuracy and system downtime by 18%. Refactored legacy code to enhance maintainability and support long-term feature scalability across future platform updates

**ESG Risk S&P 500 Personal Project:** Built a Risk ESG analytics pipeline leveraging Python, SQL, and Tableau. Phase 1 integrated preset ESG scores from yFinance and MSCI into a structured database. Phase 2 developed an automated AI/ML web-scraping system to extract KPIs and controversies from filings and news, applying NLP and machine learning to compute yFinance-style risk metrics with materiality weighting. Phase 3 delivered interactive Tableau dashboards that story tell ESG trends effectively to stakeholders.

### LEADERSHIP EXPERIENCE

**Eagle Scout:** Rebuilt K9 agility course for local police department

**Apex Outreach Service Project:** Volunteering for the local church to help rebuild homes in surrounding communities 1 week a year