

MATTHEW WILCOX

(919) 348-1158 | matthewleewilcox@gmail.com | linkedin.com/in/matthewleewilcox
Github: github.com/MatthewLeeWilcox | Portfolio: wilcoxperformancelab.com

TECHNICAL SKILLS

Programming Languages: R, Python

AI Frameworks: LangChain, Hugging Face, Ollama, Kokoro, Playwright

Cloud AI Services: AWS Bedrock, AWS Polly, Claude API

ML: Random Forest, XGBoost, SVM, Neural Networks, GAN

Dev Tools & Infrastructure: Playwright, FastAPI, Docker, Linux, Machine Virtualization

Databases: SQL(MySQL, MSSQL, SQLite), CouchDB, Redis, Neo4j

Sports Analytics Platforms: Catapult, Statsbomb, Wyscout, Hudl, PFF, EliteForm, Oura, Perch, Hawkins Dynamics, VALD, MX3, Trackman, Rapsodo, Focus

Other: Tableau, Excel, Power BI, Linux, Docker, Machine Virtualization

EDUCATION

Master of Science in Applied Data Science, New College of Florida, Sarasota, FL - *May 2025*

GPA: 3.94 / 4.0 | *New College of Florida Men's Soccer Goalkeeper*

Bachelor of Science in Data Science & Finance, Ramapo College of New Jersey, Mahwah, NJ - *May 2023*

GPA: 3.483 / 4.0 | *Ramapo College Men's Soccer Goalkeeper, Deans List, Student Athletic Council Member*

Certification: Data Visualization with Tableau, Coursera, *September 2024*

PROFESSIONAL EXPERIENCE

Sports Science Fellow, Rutgers University - Football, *May 2025 - Feb 2026*

- Automated running kinematics phase detection using machine learning models.
- Designed and implemented a SQL database and automated ETL pipelines to centralize athlete monitoring data and provide integration with dashboards and apps.
- Assist in data collection and processing for Vald, Catapult, 1080 Sprint, and Oura Rings.
- Developed algorithms for automatic run event detection using GPS data informed by academic research.
- Constructed tools to analyze Velocity Decrement in resistance training.

Sports Science Intern, Duke University Athletics, *January 2025 - May 2025*

- Designed and implemented custom softball-specific load metrics using Catapult wearable data.
- Built interactive Shiny dashboards and automated daily/weekly reports.
- Led development of a 250+ page base running analysis using GPS/velocity.
- Aligned Trackman pitch timestamps with Catapult 100 Hz data to label pitch events for predictive modeling.

Assistant & Goalkeeper Coach Men's Soccer, New College of Florida, *August 2023 - December 2024*

- Analyzed and presented post-match Wyscout reports, delivering actionable insights to coaching staff.
- Communicate data-driven recommendations for player performance optimization and tactical adjustments.
- Designed and conducted goalkeeper training sessions five times per week to enhance player development.

Graduate Research Assistant, New College of Florida, *September 2024 - December 2024*

- Scraped match day shooting and XG data from various online sources.
- Replicated prior research using an updated scraped dataset.

Head Coach, DME, Sarasota, FL, *August 2024 - December 2024*

Graduate Student Research Intern, USDA ARS, Remote, *May 2024 - August 2024*

- Built Random Forest, XGBoost, Support Vector Machine, and Neural Network models to analyze film properties.
 - Conducted significance testing and feature selection to optimize model performance.
-

PROJECTS

- **AudioPage (April 2026):** Built a self-hosted NPR-style podcast pipeline that parses PDFs with Claude Sonnet through AWS Bedrock, and synthesizes full episodes using Kokoro TTS.
- **EliteformR (September 2025):** R Package that is an API wrapper for EliteForm API.
- **CatapultPy (April 2025):** Python Package that is an API wrapper for Catapult Connect.