Caden Lippie

978-578-8373 | cadenlippie@gmail.com

EDUCATION

Syracuse University, School of Information Studies, Syracuse, NY — May 2026
Master of Science, Applied Data Science, AI Concentration
Relevant Coursework: Deep Learning, Applied Machine Learning, Cloud Management, Advanced Big Data Management

Syracuse University, David B. Falk College of Sport, Syracuse, NY — May 2025
Bachelor of Science, Sport Analytics
Relevant Coursework: Advanced Python, Data Analysis II, R for Sport Analytics

PROFESSIONAL EXPERIENCE

Data Science Graduate Assistant, Syracuse Women's Lacrosse, Syracuse, NY — September 2025 - Present
- Currently leading weekly meetings with a group of student interns to conduct data analysis projects.
- Recruited, interviewed, and hired students to create an analytics department for the women's lacrosse program.

Data Science Intern, Syracuse Women's Lacrosse, Syracuse, NY — January 2023 - August 2025
- Proactively developed a proprietary dashboard customized for Syracuse Women's Lacrosse players and coaches for the purpose of assessing player performance, scouting opponents, and mitigating injury.
- Created a Shiny app in R with unique tools and presented to coaching staff and players, integrating feedback.

Data Science Intern, Kitman Labs, Remote — January 2023 - May 2023
- Analyzed multi-factor inputs such as travel data in combination with injury data and season-level box score statistics to assess the effect of scheduling on team performance.
- Presented findings to Kitman Labs senior staff and documented results in a research paper.

PROJECTS

Proprietary Athlete Management System — June 2025 - January 2026
- Designed and built a custom platform for real users to centralize athlete performance, wellness, and testing data for actionable insights.
- Implemented a PostgreSQL database with a Python (FastAPI) backend to manage and serve data securely.
- Developed an intuitive React (JavaScript) frontend with CSS for responsive, user-friendly dashboards.

Computer Vision Tracking System — April 2025 - June 2025
- Applied YOLOv8 transfer learning and manually annotated 4,000+ objects (players, referees, goalies) to track lacrosse players in game movements using game footage.
- Achieved 99.5% recall and 99.7% precision, ensuring high accuracy in object detection.

RESEARCH

Senior Thesis - Used K-means clustering, XGBoost, and multi-output modeling to show the impact of injuries on the careers of women's lacrosse players.

Market Efficiency & Predictive Analytics Research - Co-led research project on NBA/WNBA betting strategies and presented findings at the Academy of Economics and Finance Conference in Charleston, SC, in February 2024.

SKILLS

Programming Languages: SQL, Python, R
Machine Learning & AI: PyTorch, TensorFlow, Keras, YOLO
Cloud: Azure, AWS
Other: Snowflake, PostgreSQL, Excel, Tableau, Power BI