# SAIL-USA 2026 Rolling Application

**Last Updated: 2026-04-15**

## Description

### Title and Work

The Undergraduate Student Analyst (USA) position at the University of North Carolina at Chapel Hill's Sports Analysis and Intelligence Laboratory (SAIL) offers students the opportunity to contribute directly to the university's sports analytics initiatives. Working as part of a collaborative team, USAs will apply mathematical and statistical techniques to uncover insights into athletic performance, analyzing large datasets from games and practices. In addition to conducting technical analyses, USAs will translate complex findings into clear, accessible information for coaches, administrators, and other stakeholders both within and beyond the university.

This role combines teamwork with independent problem-solving: USAs will collaborate with graduate students and faculty advisors from multiple departments to explore big-picture strategies while also completing individual or small-group tasks such as programming R scripts for data computation. The position requires a commitment of five hours per week, including a one-hour weekly group meeting and a one-hour small-group work session. While the work can be challenging, it promises invaluable professional and academic growth, equipping students with skills that will serve them well in both their studies and future careers.

### Requirements

- Currently enrolled freshman, sophomore, or junior at UNC Chapel Hill.
- Familiar with Microsoft Excel and R or Python.
- Foundational understanding of elementary statistical methods and linear regression.
- Willing to work with others to solve problems.
- Ability to communicate technical concepts to non-technical stakeholders.
- Minimum of 5 hours of work per week throughout the school year.

### Relevant Skills

- Familiarity with SQL/databases, data structures, and algorithms.
- Experience with data visualization tools (e.g., Tableau, PowerBI, Plotly, RShiny).
- Proficiency in Machine Learning models and methods.
- Familiarity with sports strategy, game theory, and probability.

- Experience with Version Control (Git/GitHub).

## Timeline

We plan on reviewing applications on the around the 15th of each month and responding to applications within a month. Please wait until at least two weeks after submitting your materials to email us regarding your application.

## Instructions

### File Preparation

- **Application:** Please answer each written question directly within this document.
- **Submission Format:** Export this file as a **PDF**. If you cannot knit to PDF directly, knit to HTML and "Print to PDF" from your browser.
- **Essay & Code:** All components of **Question 13 (Essay Analysis)** must be submitted as separate files. We recommend providing one PDF for your written essay and a separate file (or files) for your source code.

### How to Submit

Bundle your Application PDF, Essay PDF, and Code into a single **ZIP file** titled `LastName_FirstName_SAIL_2026.zip`. Email it to **Abigail Mabe (amabe@unc.edu)** with the subject line: **SAIL Application 2026**.

## Artificial Intelligence (AI) Use Policy

As part of the application process and any future work with the Sports Analysis and Intelligence Laboratory (SAIL) at UNC-Chapel Hill, you are expected to follow University guidelines on the responsible use of Artificial Intelligence (AI) tools:

- AI is a support tool, not a substitute. You may use AI to brainstorm ideas, explore research topics, or analyze problems, but you are responsible for determining what is appropriate, accurate, and relevant.

- Engage critically and responsibly. Carefully review AI-generated outputs for potential biases, limitations, inaccuracies, false information, and ethical concerns. Never submit AI-generated content without verification, and do not enter personal or confidential data into AI systems.

- Be transparent about AI use. If you use AI for any part of your work, you must clearly declare, explain, and cite that usage, following applicable standards (APA, MLA, course, or project guidelines).

- You are fully responsible for your work. Regardless of AI use, you are accountable for the quality, accuracy, and integrity of anything you submit.

- Follow the UNC Code of Conduct at all times.

By submitting this application, you acknowledge that you have read, understood, and agree to follow this AI Use Policy if selected for the position.

# Application

## Personal Information

**1. First and Last Name (First Last):**

**2. PID:**

**3. UNC Email Address:**

**4. Expected Graduation Month-Year:**

**5. Major(s):**

**6. Minor(s):**

## Basic Academic Questions

**7. Please indicate which of the following core competencies you have developed through coursework or independent study. We recognize that these skills are taught across many departments (e.g., STOR, DATA, COMP, ECON, MATH, PHYS, etc.); please check the box if you have taken the STOR course listed or a functional equivalent.**

- ☐ Introductory Statistics & Inference (e.g., STOR 155, ECON 400, PSYC 210, or AP Stats)
- ☐ Programming in R & Data Wrangling (e.g., STOR 120, STOR 320 R track, STOR 455)
- ☐ Programming in Python & Data Science (e.g., DATA 110, COMP 110, COMP 116, STOR 120)
- ☐ Data Structures & Algorithms (e.g., COMP 210)
- ☐ Probability Theory (e.g., STOR 435, MATH 535)
- ☐ Statistical Modeling & Regression (e.g., STOR 455, STOR 664)
- ☐ Machine Learning (e.g., STOR 565, COMP 562, DATA 522)

*Notes on Equivalencies/Self-Taught Material:*

**8. Please check which of the following programming languages or platforms you are comfortable using.**

- ☐ R
- ☐ Python
- ☐ SQL
- ☐ Other: (note them here)

**9. Please list any experiences you have that you feel are relevant to this application, followed by a one or two sentence description.**

## Short Answer Questions

**10. Please explain, in one or two paragraphs, why you would like to be an Undergraduate Student Analyst in The University of North Carolina at Chapel Hill Sports Analysis Intelligence Laboratory.**

**11. Please describe, in one or two paragraphs, the specific technical skills or unique perspectives you will contribute to the SAIL research community as an Undergraduate Student Analyst.**

**12. Please choose a scholarly article from the Journal of Quantitative Analysis in Sports related to sports analytics and summarize the article in a 250-word letter to a coach. Remember to cite article in a formal citation (e.g, MLA, APA).**

## Essay-Analysis

**13. Please indicate a sport in which you would like to conduct applied research through SAIL. Then, prepare a professional, research-style written analysis (maximum 1,500 words) on a topic within that sport that answers a clear research question of your choice. This is your opportunity to demonstrate how you translate data into strategy.**

Your submission must:

- Be written in a formal, professional style similar to an academic paper or industry report. We recommend using the structure of Introduction/Background, Methods, Results, and Discussion/Conclusion.
- Clearly describe your hypothesis, data sources, and the statistical or machine learning methodology used.

- Limit tables and figures to a maximum of five (words within tables/figures do not count toward the word limit).
- Focus on communicating your thinking, interpretation, and conclusions in writing — not just presenting code or raw output.

You must perform your analysis using R or Python (you may also use other software or programming languages in addition). The code you write is separate from your essay but should be well-documented and provided with the application submission. Do not embed full code listings in the essay itself; instead, focus on explaining your methods and findings in clear, professional prose.