# **Colby Eagan**

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# **EDUCATION**

### University of North Carolina at Chapel Hill

Chapel Hill, NC

BS Computer Science, BS Statistics | 3.7 GPA

May 2026

- Relevant Coursework: Data Structures and Algorithms (Java), Research in Computer Science (Python and Java), Discrete Math, Foundations of Programming (Java), Web Design, Linear Algebra
- Involvement: Biokind.org Data Analyst Team Lead, Product Management Club PM, Pearl Hacks Mentor

#### **SKILLS**

**Technical**: • Python • Java • APIs • HTML • CSS • JSON • CSV • Yaml • Correlation Statistics • ML

**Language**: • English (native) • Spanish (fluent)

#### WORK EXPERIENCE

Research Assistantship

# University of North Carolina Chapel Hill / University of Pennsylvania

Chapel Hill, NC

Aug 2022 - Present

- Working with Dr. Deen Freelon on computational sociology projects utilizing machine learning and content analysis to quantify communication paradigms with internet and social media data
- Collaborating with team members at top institutions to publish high impact computational sociology publications in top peer-reviewed journals, resulting in recognition from leading scholars in the field

SAS Institute Cary, NC

Software Developer Internship

May 2023 - Aug 2023

- Engineered yaml files to execute multi-tenant cloud pipeline scripts, reducing testing down time by 80%
- Created CI/CD optimizers to run only required scripts on files by analyzing dependency architecture and eliminating all unnecessary hardware costs; reduced hardware costs of DevOps by 30%
- Reconfigured scripts to execute by regular expression conditionals, creating efficient multi-tenant use-cases

## **Discovery Capital Management**

Norwalk, CT

Quantitative Researcher Internship

May 2022 - Aug 2022

- Lead research and development on the quant team to track market sentiment through automated data collection and natural language processing, resulting in the first active NLP tool in the team's portfolio
- Crafted an innovative automated market ideology tracker used in quantitative equity research which led to a 90% reduction in workload for the team when compared to manual research and data cleaning

### **PROJECTS**

## AFTSA (APIs For Time Series Analysis) - Python Package

Personal Project – pvpi.org/project/AFTSA/

- Created python package AFTSA to share tools for calling APIs in precise time intervals, in statistically consistent time series formalities, and with data structure storage for time series and regression analysis
- Successfully garnered over 6,000 downloads for my Python package, demonstrating its widespread adoption within the developer and quantitative research community

#### **Gaussian Elimination Calculator**

Personal Project - https://github.com/colbyeagan/gaussianEliminationCalculator

• Developed a user-friendly Gaussian Elimination calculator with a Graphical User Interface (GUI) to efficiently solve and reduce linear multivariate systems of equations 90% faster

### North Carolina Science Olympiad Test Writer

Personal Leadership Project

• Won multiple state medals and was part of the regional championship winning team; invited to return as a test writer and event coordinator for the North Carolina Science Olympiad program STEM events