Simon Sprouse

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OBJECTIVE I'm an aspiring Data Scientist seeking an internship for Summer 2024.

EDUCATION

Bachelor of Science (B.S) Computer Science **May 2021 – May 2025 (Expected)**
Texas A&M University, College Station

Major GPA**: 4.0,** Cumulative GPA: **3.93**

Languages **Python** (Fluent), **C/C++** (Advanced), **SQL** (Advanced), **HTML/CSS** (Intermediate)

Libraries Pandas, Numpy, SkLearn, PyCaret, Scipy, Stats, OpenCv, Flask, SQLAlchemy, BeautifulSoup, Requests, PyTorch, TensorFlow, Selenium, SymPy, Regex

Coursework Data Structures, Discrete Math, Computer Architecture, Statistics, Calculus I, II, III Machine Learning, Principles of Data Science, Computer Systems

EXPERIENCE

Quant Trader **Aug 2023 - Present**
RATH Research
- Analyzing / Reporting on current research papers on topics like ML/AI in finance.
- Developing trade strategies for hedge fund risk management / alpha generation.
- Building back-testing infrastructure for current strategies on past data.

Teaching Assistant – Data Structures and Algorithms **May 2023 - Present**
Texas A&M University
- Extensive Debugging of students' C/C++ projects using tools like GDB and Linux.
- Preparing material and hosting exams reviews for **400+** students across sections.
- Creating YouTube videos covering upcoming topics for the class.

Vice President – Aggie Data Science Club **May 2023 – Present**
Texas A&M University
- Responsibility to run internal affairs and host weekly presentations about Data Science.
- Facilitating the club's growth to now over **700 members.**
- Public outreach to company sponsors, faculty speakers, and project opportunities.

PROJECTS

American Airlines - Bag Prediction Machine Learning Model **Apr 2023**
- Objective to predict checked bags to increase flight scheduling efficiency.
- Performed extensive feature engineering on close to 1,000,000 flight logs.
- Designed a LightGBM Machine Learning Regression Model with **R^2 of 89.82%.**

OpenCV Filtering Art - https://github.com/Simon-Sprouse/Filter-code **May 2023**
- Designed an image filtering algorithm split an image into weighted sub-arrays.
- Used OpenCV bit-masking to re-color and layer image maps – very pretty results.

Portfolio Website - https://www.simonsprouse.com **Sep 2023**
- Used HTML/CSS to style a portfolio website after my favorite works of art.
- Used JavaScript to add a style toggle feature between two different stylesheets.

AWARDS

American Airlines Spring Hackathon – First Place **Apr 2023**
ADSC 2023 Project Showcase – First Place **May 2023**
Aggie Originals Battle of the Bands – First Place **Aug 2023**