# **Simon Sprouse**

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

EDUCATION BS Computer Science *Honors*, (Junior) May 2021 – May 2025 (Expected)

Texas A&M University, College Station Major GPA: **4.0**, Cumulative GPA: **3.93** 

### **EXPERIENCE** American Airlines - Bag Prediction ML Model

Jan 2023 - Apr 2023

- Objective was to improve on airport and 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%.

### LEADERSHIP Vice President – Aggie Data Science Club

May 2023 - Present

- Responsibility to run internal affairs and host club events.
- Facilitated the club's growth to now over 700 members.
- Public outreach to company sponsors, faculty speakers, and project opportunities.

### **TEACHING Discrete Math**, Texas A&M University

May 2023 - Aug 2023

Prof. Andres Klappenecker

- Helped manage a class of ~40 students.
- Responsible for hand grading HW (proofs, theory, algorithms, word problems).

# Data Structures and Algorithms, Texas A&M University

May 2023 - Present

Prof. Teresa Leyk

- Currently help manage multiple Lab sections of ~20 students each.
- Assist students with programming applications (I've debugged 100's of assignments).
- Host Week-In reviews across all sections for 400+ students.

## PROJECTS OpenCV Filtering Art - <a href="https://github.com/Simon-Sprouse/Filter-code">https://github.com/Simon-Sprouse/Filter-code</a>

May 2023

- Designed an image filtering algorithm split an image into equal sub-arrays.
- Used OpenCV bit-masking to re-color and layer image maps very pretty results.

### SQL Database Design/Backend

Aug 2023

- Worked on a web team to design a message board website hosted on AWS.
- Responsible for integrating the User's landing page along with several update features.

### AWARDS ADSC Spring Hackathon - First Place

Apr 2023

- Designed an ML model to classify customers as either Business/Leisure.
- Finalized/Presented Logistic Regression model with F-Score 90.67%.

RELEVANT COURSEWORK Data Structures Discrete Math Computer Architecture Statistics I Computer Networks Database Systems Machine Learning

WORK EXPERIENCE

Private Tutor(Math/CS/Science)Jan 2017 – Jan 2018Waiter(Bush's Diner)May 2019 – May 2021Lifeguard(City of Austin)May 2022 – Aug 2022Undergrad TA(Texas A&M University)May 2023 – Present

TECHNICAL

Languages - Python, C++, SQL, R, Jscript, HTML, CSS

SKILLS Libraries - NumPy, Pandas, Sklearn, PyCaret, SciPy, OpenCV, Stats, Flask