

Alexander Henry Donald

704-651-8034 | aldonald@davidson.edu | Charlotte, NC | <https://www.linkedin.com/in/alexander-donald> | <https://github.com/aldonald81>

EDUCATION

Davidson College

Bachelor of Science, Computer Science, Minor in Data Science

Davidson, NC

Expected May 2023

- GPA: 3.83
- Relevant Coursework: Analysis of Algorithms, Data Structures, Database Systems, Machine Learning, Machine Reasoning, Data Science and Society, Statistics, Linear Algebra, and Computer Organization

App Development

Independent study

Davidson, NC

January 2021 – May 2021

- Learned how to implement JavaScript and backend databases to create successful React Native applications
- Developed our own application, Kumo Metrics, which is a data collection app that allows coaches to be smarter about their training routines without sacrificing performance on or off the field

SKILLS

Languages: Python (advanced), HTML (advanced), CSS (advanced), PHP (advanced), MySQL (intermediate), JavaScript (intermediate), jQuery (intermediate), Java (intermediate), R (intermediate), React Native (intermediate)

Other Technical: Git (advanced), Power BI (advanced), Google Cloud Platform (intermediate), Firebase (intermediate)

WORK EXPERIENCE

Cats Stats

Data Analyst

Davidson, NC

August 2019 - Present

- Perform rigorous data analysis for Davidson basketball, baseball, and football teams to identify strengths, weaknesses, and tendencies of these teams as well as those of opponents
- Effectively communicate results to head coaches by presenting a clear summary of the findings to drive effective data-based change in teams' strategies

Data CATS

Data Analyst and Student Tutor

Davidson, NC

October 2020 – Present

- Advise other students with data-related class assignments (stats, visualization, general programming, etc.) and faculty with projects for their classes
- Work to create a mutual understanding of the problem presented and clearly lay out possible solutions that are straightforward and understandable

Pro Skills Basketball Data Analytics Intern

Data Analyst

Davidson, NC

January 2021 – August 2021

- Leading the development of a Power BI dashboard to provide organization leaders with snapshots of how they are performing in areas such as tryout registrations, team memberships, website views, and other metrics
- Using problem solving to pull data effectively and efficiently from a variety of sources via Python scripts on Google Cloud Platform, clean raw data, and incorporate into Power BI's automatic data refresh feature
- Communicating clearly with company leaders while engaging in a feedback cycle to ensure the report meets their needs

Projects

NCAA March Madness Prediction Model

Machine Learning

Davidson, NC

Mar 2022 – Present

- Used a k-nearest neighbors algorithm to build a model to classify tournament teams as "x-round" caliber teams to predict matchups
- Implemented validation sets to tune hyperparameters for final model which currently sits at 99th percentile in the ESPN Bracket Challenge up until the Final Four

Vail Comments

Full Stack Web Development

Davidson, NC

Nov 2021 – Feb 2022

- Developing a platform for Davidson College students to give feedback on specific menu items at the dining hall in the form of upvotes, downvotes, and comments and receive alerts when favorited meals are coming up on the menu
- Utilizing advanced HTML, CSS, JS, and PHP to interact with a backend MySQL database and render a user friendly front-end
- Independently learned how to incorporate automated emailing with PHP using PHPMailer and Python using an SMTP connection to efficiently communicate to users

Fantasy Baseball Team Builder

Machine Reasoning

Davidson, NC

Nov 2021 – Dec 2021

- Applied machine reasoning techniques like genetic algorithms to evolve the optimal fantasy baseball lineup for the 2021 season
- Returned a lineup within 2.5% of the budget constraint with an exceptional combination of talent and value