DAVID SWEASEY

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Objective

Seeking an internship to buttress my talents within computer science and help an organization thrive. Hoping to demonstrate my technical, organizational, and collaborative skills within coursework and research.

Education

North Carolina State University, Raleigh, NC   *Anticipated May 2025*

    B.S. in Computer Science: Artificial Intelligence Concentration – GPA 4.0

    Minor: Mathematics

Relevant Courses

    Accelerated Deep Learning

    Intro to Artificial Intelligence

    Algorithms and Data Structures

    Linear Algebra

Projects

Skin Cancer Neural Network, Fall 2024

- Constructed and trained a convolutional neural network on 10,000 images of skin lesions
- With 90% accuracy, the model could determine if the image was benign or malignant
- Employed confusion matrices and model heat maps to gauge model efficacy

Artificial Intelligence Library, Spring 2024

- Implemented the A* algorithm to enable an agent to effectively path-find in custom environments
- Designed and deployed a variation of the minima algorithm to allow an agent to win at Connect 4
- Developed a simple reflex agent using entirely first-order logic with SWI-Prolog

Pooling Layer Analysis of CNNs on MNIST Datasets, Spring 2024

- Created a convolutional neural network for image classification tasks on various MNIST datasets
- Analyzed and documented the effects of pooling layer size, type, and frequency on model accuracy
- Drafted a scholarly research paper reporting my findings

CoffeeMaker, Fall 2023

- Software that enables staff to create coffee recipes and users to place orders. Similar to an app like Grubhub
- Collaborative project with frontend, backend, API usage, and databases
- Employed various Java libraries and frameworks such as SpringBoot, RestAPI, and Hibernate
- Developed databases using SQL and sleek frontend using AngularJS

Skills

Python	Java	C/C++
HTML	CSS	JavaScript
Excel	Git/GitHub	Problem Solving
Communication	Leadership and Collaboration	Organization
MySQL	NVIDIA CUDA	Large Language Models

Leadership Experience

Associate Chair, Alpha Phi Omega Service Fraternity, Raleigh NC, Fall 2023
- Distributed weekly updates and action items to associate (less active) members
- Worked on a committee to help plan the semesterly retreat

Secretary, Alpha Phi Omega Service Fraternity, Raleigh NC, Spring 2023
- Drafted and distributed weekly emails to the brotherhood containing action items, upcoming service events, and other pertinent information
- Created organized minutes for each fraternity meeting with a key and color coordination to enable easy scanning of information
- Organized a career development night for individuals in the organization to learn about proper creation of resumes and cover letters
- Tabulated brotherhood attendance for required events. Maintained a living document for excused and unexcused absences

Honors and Achievements

Dean's List (4.0 GPA), North Carolina State University, Spring 2024
Dean's List (4.0 GPA), North Carolina State University, Fall 2023
Dean's List (3.95 GPA), North Carolina State University, Spring 2023
Invited to and performed at Midwest Clinic, December 2022
Dean's List (4.0 GPA), North Carolina State University, Fall 2022
Dean's List (4.0 GPA), North Carolina State University, Spring 2022
Dean's List (4.0 GPA), North Carolina State University, Fall 2021

Hobbies

Weightlifting
Golf
Chess
Programming
Music Performance

Volunteer Experience

Marbles Kids Museum, Raleigh NC, Spring 2022 – Ongoing
- Help set tables, organize food on tables, and prepare for an event
- Mix and serve a fruit punch "tea" throughout the event
- Organize and lead assembly lines for setup and cleanup

Brentwood Boys and Girls Club, Raleigh NC, Fall 2022 – Ongoing
- Read to kids; tutor kids in math, science, and English
- Coordinated and lead activities for the kids to play