Arden Neff

979-888-0493 | ardenneff@gmail.com | linkedin.com/in/arden

EDUCATION

Bachelor of Arts, Computational Math   Aug. 2021 – May 2025
Southwestern University   *Georgetown, TX*
GPA: 3.98/4.00

Relevant Coursework: CS1, Data Structures, Operations Research, Database Management, Algorithms, Computer Organization, Discrete Math, Machine Learning, Puzzling Programs

DATA ANALYTICS EXPERIENCE

Plantible Foods AgTech Data Science Intern | *Python, R, Excel*   May 2024 – Present
- Stockpiled 360 standardized structural/biomass measurements across four greenhouse environments, improving model accuracy by up to 12% and reconciling efficiency and uniformity within tech startup space
- Contributed 300 lines of code to a Machine Learning algorithm trained at new facility location, improving forecast predictability by up to 30%
- Gained familiarity with conventions of backend web development using FastAPI and Google Cloud SDK

Optimizing Grape Harvest Using Linear Programming | *Microsoft Excel*   August 2022 – March 2023
- Developed a ground-up research proposal using historical vineyard data, local weather predictions, and client heuristics to mitigate waste and time constraints in harvest scheduling
- Designed, implemented, and evaluated a SIMPLEX linear grape waste reduction and an NRG nonlinear model of harvest reschedule, saving up to $1,300 per harvest
- Presented results in two conferences at the national and statewide levels, receiving first place in the Mathematics and Computer Science poster section at the Texas Academy of Science convention

QSIDE Datathon4Justice | *R*   November 2023
- Donated 20 hours to a virtual collaborative event focused on analysis and accessibility of statewide police reporting data through development of a web application
- Self-learned the Shiny app package in Rstudio to improve upon user interface within 20-hour time constraint
- Presented contributions and communicated issues to 60+ contributors to better reflect group goals in future work

OTHER EXPERIENCE

Alpha Chi Honor Society President   November 2022 – Present
Southwestern University   *Georgetown, TX*
- Organized Alpha Chi's first kennel-cleaning event with the WillCo regional animal shelter, putting an end to a five-year dormancy in community engagement within our chapter
- Facilitate connections with the campus Learning Center through the organization of annual Study Buddies event, garnering 7 visitors in its first iteration and producing 52 handmade dog toys to be donated to fosters

Computer Science Tutor   January 2024 – Present
Southwestern University   *Georgetown, TX*
- Contribute one-fifth of total student attendance across 28 tutors
- Facilitate understanding of various foundational CS topics (primitive/abstract data types, conditional statements, troubleshooting, debugging, sorting/searching algorithms, etc.) in weekly 2-hour group sessions
- Exercise training regarding problem deescalation, navigating group-help dynamics, reinforcing positive cultural rhetoric, and encouraging candid discussion between peers

Vineyard Hand   April 2017 – Present
Christoval Vineyards   *Christoval, TX*
- Perform routine winery lab procedures (titrations, °Brix testing, yeast additions, data entry) as well as all facets of physical vineyard labor including pruning, hoeing, sampling, and fining
- Organized, advertised, hosted, and taught the first annual "Painting with a Twist" 2023 event to increase local engagement for the vineyard, with 70+ total customers attending

SKILLS

Python, Java, PHP, SQL, HTML, Github, R, C++, assembly, Linear Programming, team management, written and oral reporting, Spanish