Mackay Fisher

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EDUCATION

Texas A&M University | Bachelor of Science May 2025
Major: *Honors Computer Science (Emphasis in Data Science) | Major GPA: 4.00* ***Cumulative GPA:*** *3.96*
Major: *Honors Applied Math | Major GPA: 4.00* ***Minor:*** *Cybersecurity*
Honors: *Deans List, Gus D Wheat Scholar, G Alan Cannon Endowed Scholars, Lechner scholarship, Brown Honors Program*
Involvement: *TAMU Hack, TAMU Coding Club, Cyber-Security Club, Peer Teaching*

SKILLS & PROFICENCIES

Programing Languages**:** Python| Git | C++ | CSS/ HTML | Haskell | Java | JavaScript | React Native | SQL.
Development**:** Agile | Google Cloud | REST API | Databases | Data Structures | Machine Learning | Web Development.
Professional Certifications**:** AWS Cloud Practitioner (9WH7SS3C4BE1Q391).
Relevant Coursework: Machine Leaning |Data Structures and Algorithms | Computer Organization | Computer Systems

PROFESSIONAL EXPERIENCE & PROJECTS

BILDIT | *Charlotte, NC* (Remote)
Software Engineering Intern & Technical Lead (Startup) May 2023 - August 2023

- Actively built **full stack** mobile and web applications to fit customer needs as part of our **agile development team**.
- Worked with **CI/CD** implementation and active test monitoring reducing over all redundancy and code failure.
- Served as technical lead managing a group of seven high school interns ensuring quality assurance, assisting in production development as well as **AI research**.

Texas A&M Data Science Department | *College Station, TX*
Assistant Researcher on Optimal Path Learning Project August 2023 - Present

- Collaborating on a team exploring the approximation of unknown functions emphasizing immediate predictions.
- Assisting in showcasing the advantages of **over-parameterization in modern machine learning** and its role in creating near-optimal predictions.
- Contributing to creating guidelines for **optimal function recover**, balancing over parametrizing and penalty scaling.

Texas A&M Computer Science Department | *College Station, TX*
Peer Teacher August 2023 - Present

- Actively hold office hours and weekend reviews for students with course work within the computer science and mathematics department leading to a reported increase in grade and **understanding by 97%** of students.
- Lead three lab sections of 25+ students in **C data structures and algorithms** bi-weekly.
- Host weekend reviews in **computer architecture design and Data Structures and algorithms**.

PROJECTS

Free Trial Service| BILDIT LLC | Bitbucket Pipelines, Docusaurus, *Firebase, Google Cloud, HTML/CSS, JavaScript, React*

- Networked multiple web apps to pragmatically create instances demonstrating our native software with flexible **UI.**
- Utilized **service accounts** and **cloud infrastructure** to link dynamic changes and authentication over multiple websites leading to increased integration by users and follow up by sales team.

AI-Mario | *Python, Stable Baselines, Matplotlib*

- Utilized vector stacking and grey scale imaging to analyze the environment, then implemented a distance-based reward system to track progress per iteration leading to a path efficiency increase by .06%.
- Optimized path correction utilizing **Stable Baselines PPO** model to update the path each trial until level completion.

Web-Scraping | *Beautiful Soup,* Matplotlib, Pandas, Python

- Created web scraping software to read nested html and distribute target information to **Pandas DataFrames.**
- Utilized a decision hierarchy to identify and maximize profitability based on location, distribution, and total cost.
- Demonstrated logistical correlations through **Matplotlib** between profitability rating and use of raw materials.