# **Ethan Childs**

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### **Education**

**Texas Tech University** 

Lubbock, Texas

Expected Graduation: Spring 2027

Master of Science in Computer Science (Accelerated Program)

Focus: Data Science

Bachelor of Science in Computer Science and Mathematics

• GPA: 3.7

## **Work Experience**

**Data Science Intern** 

August 2025 – Present

AthletIQ, LLC

Remote

- Developed a Shot Analysis tool that processes Excel outputs from the company's AI model, cleans and structures the data, and organizes results into all possible shooting combinations.
- Built a Machine Learning Insights Tool that analyzes the cleaned datasets, detecting outliers and surfacing performance patterns to help the user improve basketball shooting ability.
- Designed a SQL workflow to store and query the cleaned datasets, enabling scalable analysis and seamless integration with Python scripts for deeper performance insights.

**Data Analyst** 

January 2025 – Present

Lubbock, Texas

NemaLife inc.

- Annotated thousands of experimental videos of *C. elegans*, producing labeled data used to train the company's AI health-monitoring model.
- Utilized Python to create data visualizations and streamline the export of annotations into the AI model.
- Organized and formatted experimental results in Excel to create clear, structured datasets for internal reporting and research use.
- Collaborated with a team of 10 analysts to meet project deadlines, ensuring consistency and accuracy across large datasets.

## **Projects**

## NASA Collaboration: Space Biology Research

NemaLife inc.

- Collected live video data of *C. elegans* to track health and document microchip responses.
- Analyzed results with Python, producing plots and diagrams that supported published research findings.
- Structured key statistics in Excel, contributing organized datasets for the final NASA project report.

#### **AI-Powered Machine Learning Dashboard**

Python, Streamlit, scikit-learn, Pandas, NumPy, Matplotlib

- Built a Streamlit web app for end-to-end machine learning on CSV data, supporting both classification and regression tasks.
- Implemented automated preprocessing and model training with scikit-learn pipelines, with Linear Regression predicting 94% of target variation and Random Forest Classification achieving 89% accuracy on test data.
- Integrated data visualizations including confusion matrix heatmaps, comparison scatter plots, and feature importance charts, plus model export/import and downloadable prediction files.

### **Technical Skills**

Programming Languages: Python, SQL, R, Bash

**Libraries and Frameworks:** Pandas, NumPy, scikit-learn, Matplotlib, Streamlit **Software Tools:** Excel, GitHub, VS Code, Microsoft Word, Microsoft PowerPoint

## **Involvement**

### Kappa Sigma Fraternity

Philanthropy Committee Member

- Partnered with local businesses to plan and execute fundraising events, increasing fraternity contributions to philanthropy initiatives.
- Presented event plans and ideas through slide decks to the entire chapter and partner sororities, strengthening public speaking and collaboration skills.