Sivon Pearson

Austin, TX • sivonpearson@gmail.com

Work Authorization: U.S. Citizen

LinkedIn: https://www.linkedin.com/in/sivon-pearson-59157a214/ • GitHub: https://github.com/sivonpearson

Portfolio: https://sivonpearson.github.io/portfolio-site/

Diligent and detail-oriented with a strong foundation in software development, algorithms, and data structures. Seeking an internship or entry-level position to apply technical skills to and contribute to innovative projects.

Education

THE UNIVERSITY OF TEXAS AT DALLAS

Bachelor of Science in Computer Science

- Cumulative GPA: 3.911 / 4.000
- 4-Year AES Engineering Scholarship Recipient
- Graduated: May 21st, 2025 | Magna Cum Laude

Professional Experience

Growth Acceleration Partners | Contract - AI/ML-Tool Developer

- Developing an AI tool to prioritize messages from Gmail, Slack, and HubSpot using transformer-based NLP models, improving project communication by highlighting urgent and important messages.
- Experimented with predictive models to estimate project phase durations based on inputs like complexity, codebase size, and automation percentage.
- Integrated real-world data pipelines, applied feature engineering and encoding techniques, and optimized models for performance and interpretability.

Skills used: Python, Machine Learning, Gmail API, Slack Bolt, HubSpot CRM API, sklearn, xgboost

Growth Acceleration Partners | Contract - Slack-HubSpot Sync Developer

- Built an app to upload Slack deal channel conversations to HubSpot deals every 24 hours.
- Integrated Slack and HubSpot APIs using Flask and Slack Bolt.
- Deployed on Microsoft Azure Web App with data stored in Azure SQL Server.

Skills used: Microsoft Azure Web App, Microsoft Azure SQL Server, Python, Flask, Slack Bolt, HubSpot API, HubSpot CRM, GitLab

Growth Acceleration Partners | Internship - Chatbot Developer

- Built a Slack-integrated chatbot for company policy lookup using Flask and Slack Bolt.
- Processed documents with ChromaDB and Hugging Face embeddings for query-based retrieval.
- Leveraged Mixtral-8x7B (AWS Bedrock) for summarizing relevant document fragments.
- Managed document storage in AWS S3 and deployed services via AWS App Runner and ECR with Docker.
- Configured AWS IAM permissions and secured keys with AWS Secrets Manager.

Skills used: AWS AppRunner, Docker, AWS Bedrock, ChromaDB, HuggingFace Embeddings, Python, Flask, Slack Bolt,

AWS DynamoDB, AWS IAM, GitLab

Technical/Computer Skills

 $Languages: Java \bullet JavaScript \bullet C \bullet C + + \bullet C \# \bullet Python \bullet MIPS \bullet Prolog \bullet Racket \bullet RStudio \bullet Bash \bullet SQL$

Web Technologies: TypeScript • CSS • React • Vite • Next.js • Tailwind • Styleguidist • Cypress

Databases: MySQL • DynamoDB • MongoDB

Frameworks & Tools: AWS • Azure • Unity3D • Blender 3D • Audacity • Docker

Collaboration Tools: Confluence • GitHub • GitLab • Slack • Trello

Operating Systems: Windows • Unix

Python Libraries: NumPy • OpenCV • TensorFlow • PyTorch • Pandas

Richardson, Texas Fall 2022 - Spring 2025

December 2024 - May 2025

June 2024 - August 2024

June 2025 - Present

Relevant Coursework

Data Structures and Algorithms • Software Engineering • Database Systems • Advanced Algorithm Design/Analysis • Machine Learning Automata Theory • Introduction to Computer Vision • Computer Networks • Discrete Mathematics • Computer Architecture Computer Architecture • Probability and Statistics • Digital Logic and Computer Design • OS Concepts

Academic Projects/Personal Projects

Climate-Change Forecasting Tool | UTD Senior Project

- Led a team of peers to design and develop a climate-change forecasting web tool in order to predict the severity of • climate-related disasters in the future using historical data.
- Developed a backend in Python which houses a Temporal Fusion Transformer (TFT) and multiple APIs from which to fetch data to train the TFT.
- Developed a frontend in JavaScript which houses an interface to interact with the model to make predictions about the severity of climate-related disasters in a specific region and at a specific time in the future.

Skills used: Python, Machine Learning, PyTorch, Lightning AI, Flask, JavaScript

Movie Rating Guessing Game | Web Development

- Developing a game where users must guess the IMDb rating of a random movie, given a number of the movie's attributes, such as its title, poster, plot, release year, etc.
- Designed a backend to fetch movie data from the OMDb API, which is queried by movie title with a random word from the random-words npm package.
- Used the node-vibrant npm package to extract colors from the current movie's poster image for frontend styling.

Skills used: TypeScript, React, Vite, Tailwind CSS, CSS, GitHub, Vercel

Snake Game and Neural Networks | Neural Network Modeling and Testing

- Coded the game Snake with a binary implementation and coded a genetic neural network that uses ReLU activation in hidden layers and SoftMax activation in the output layer.
- Trained the model by randomly changing the network's parameters slightly over multiple generations.

Skills used: Python, NumPy

Highway Racing Game/FPS Car Game | Game Design

- Coded physics-based game in Unity where the player races through traffic with cars that are directed by algorithms to maintain a certain route.
- Modeled vehicles, environment, animation in Blender 3D.
- Designed sounds in Audacity.

Skills used: Unity, C#, Blender, Audacity

Minesweeper and 2D Game Engine | Game Design

• Built and coded a game engine and GUI for Minesweeper. Skills used: Java

Related Extra Curricular Projects

UTD Trends | Club Programming Project

Worked with Nebula Labs to program UTD Trends, a tool that compiles historical course data for students to use to plan which classes to take and to facilitate the course registration process for students.

Skills used: JavaScript, React, Next.js, Tailwind CSS, Styleguidist, Cypress, GitHub

Extra Curriculars

2022 - 2024

2024 - 2025

2021

2023 - 2024

2025 - Present

Spring 2025