LOGAN VAZ

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EDUCATION

The University of Texas at Austin — Bachelor of Business Administration, Canfield Business Honors; Bachelor of Science, Computer Science Honors — May 2025
GPA: 3.8/4.0

Skills

• Python, Java, C++, C, JavaScript, CSS, HTML, Octave, React, Keras, SQL, Graphviz, Microsoft Office, R, Operating Systems, Pandas

Work Experience

Hiller Measurements – *Systems Engineering Intern* — May-October 2022

• Utilized mathematical and machine learning models to reduce lead time of Radio-Frequency products by approximately 5 weeks
• Used various computer science principles (multiprocessing, caching, lookup tables) to increase model convergence speed
• Employed various python libraries to create easily understood, interactive visualizations and speed up essential parts of the model
• Presented weekly, demonstrating progress to executives and corporate partners, resulting in further investment in similar areas

PROJECTS

Market Segment Analysis – *Analyzing Healthcare at Home* — May 2022

• Examined changes in legislative policy based on COVID-19 and analyzed how that combined with technological advances (Deep Learning, blockchain, wearables) to make healthcare at home a more viable option
• Interviewed doctors, startup heads, and demographically diverse patients to determine feasibility of healthcare at home
• Developed prototype website via Flask which used deep learning on pipelined user input to map skin pictures to cancerous-cell prediction and medical symptoms to predicted underlying cause which were displayed on user-friendly graphs

Logical Circuit Emulator – *Simulate and Visualize Circuit* — April 2022

• Utilized graphs, priority queue, and greedy gate logic inside C backend to simulate user-declared circuit as quickly as possible
• Interfaced frontend python with C backend to produce graph of values of ports the user was interested in through time
• Piped data from C backend into Graphviz to draw defined circuit, aiding user ability to debug their circuit

WebCrawler – *HTML Search Engine* — December 2021

• Created function to recursively parse user input, allowing for negation, and/or statements and n-grams to be queried
• Developed methods to filter tens of thousands of HTML documents by the user's query
• Employed HashMaps and Inverted Indexes to reduce average search time

Facial Emotion Detector – *Using Deep Learning to Recognize Emotions from Pictures* — June 2021

• Utilized deep learning frameworks to create model with test accuracy almost 1% higher than advertised maximum
• Checked against class bias with validation metrics such as F1 score on both test and validation set
• Employed convolutions, batch normalization, and skip-connections to increase convergence speed and generalizability to test set

World History Timeline – *Client: AP World History Teacher* — May 2020

• Created interactive world history timeline allowing users to filter events based on time period, type of event, and location
• Developed organizational structure through color-coding events based on cultural, economic, political theme
• Ensured compatibility across devices with various screen sizes by making the timeline an adjustable length

RELEVANT COURSEWORK

University of Texas at Austin – *Computer Science, Business* — August 2021+

• Data Structures Honors, Discrete Mathematics Honors, Multivariable Calculus, Linear Algebra, Statistics, Management Information Systems Honors, Computer Architecture Honors, Operating System Honors, Innovation and Entrepreneurship Honors, Data Science for Business Applications Honors

Coursera/LinkedIn Learning – *Deep Learning, Data Science* — February 2020 – May 2021

• Deep Learning Specialization: Neural Networks and Deep Learning, Improving Deep Neural Networks, Structuring Machine Learning Projects, Convolutional Neural Networks, Sequence Models
• Data Mining Specialization: Data Visualization, Text Retrieval and Search Engines, Text Mining and Analytics, Pattern Discovery in Data Mining, Cluster Analysis in Data Mining, Data Mining Project
• Other: Social Psychology, Machine Learning, Predictive Analytics and Data Mining

Liberal Arts and Science Academy – *GED* — August 2017 – May 2021

• Multivariable Calculus, Linear Algebra, Web and Mobile Applications, Advanced Computer Science, AP Computer Science