

Kolade Alabi

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Education

The University of Texas Rio Grande Valley

Edinburg, TX

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.8/4.0

May 2023

- **Coursework:** Data Structures and Algorithms, Software Engineering I, Deep Learning, Introduction to Data Science, Programming in Unix/Linux, Computer Science I/II, Object Oriented Programming in Python, Advanced Data Mining & Machine Learning, Automata Theory, Applied Statistics
- **Course Staff:** Teaching Assistant (Computer Science II)

Skills

Languages Python, C/C++, JavaScript, R, Java, HTML/CSS

Developer Tools Git, Jira, VS Code, Visual Studio, SQLite, Slurm, Apache Jmeter

Frameworks pandas, NumPy, TensorFlow, Keras, Matplotlib, Scikit-learn, SciPy, Flask, Streamlit, Spring Boot

Experience

JP Morgan Chase, Software Engineering Program

Houston, TX

SOFTWARE ENGINEER

Aug. 2023 - Present

- Developing a PowerPoint tool for automatically watermarking slides and providing copyright-free media
- Refactoring Apache Solr powered indexing to MongoDB native storing and indexing
- Migrating application to AWS, reducing local computing costs substantially

Capital One, Technology Internship Program

McLean, VA

SOFTWARE ENGINEERING INTERN

June. 2023 - Aug. 2023

- Enabled Universal Deep Link servicing across all channels for partners like Walmart, Google Autofill, and Zelle
- Improved linking experience for 38 million users by improving ease of access to Enterprise Account Servicing Experiencing (EASE)
- Deployed a PostgreSQL database on Amazon Aurora, eliminating the use of a middleman service and reducing expenses by 19%
- Made use of Java Spring boot to generate and tokenize/detokenize refactored hyperlinks

Research

Alzheimer's Detection Project

Edinburg, TX

UTRGV UNDERGRADUATE RESEARCH ASSISTANT

Aug. 2022 - May. 2023

- Discovered novel applications of Transfer Learning by analyzing and drawing conclusions from 5 research papers on its applications in medicine
- Held multiple meetings with University professors to plan research projects in preparation for a conference paper submission
- Researched optimal methodologies for predicting Alzheimer's in patients with blood samples

Professional Development

Google, Computer Science Research Mentorship Program

Remote

CSRMP MENTEE

Feb. 2023 - May. 2023

- Selected to be a part of Google's Computer Science Research Mentorship Program (CSRMP)
- Received computing research mentorship from a Google researcher
- Matched in a pod with other students who have similar research interests (Natural Language Processing)

Google, Computer Science Summer Institute

Remote

CSSI SCHOLAR

July. 2022 - Aug. 2023

- Participated in a 4-week intensive computer science summer program for incoming college students led by Google engineers
- Engineered 16 webpages using JavaScript, HTML/CSS, and Bulma including a collaborative final project presented to 30+people including Google Employees

Projects

Anime TrVAE | Python, TensorFlow, Keras, OpenCV, Pillow, Scanpy, Hugging Face, Slurm

- Implemented a Transfer Variational Autoencoder, with datasets from Hugging Face, Google Cartoon Set, and the CelebA dataset, for bidirectional image transfers across Anime, Cartoon, and Realistic classes
- Trained custom TensorFlow models on 150,000 images across 3 different classes in GPU Cluster environment with Slurm

Some Context, Please? | Python, TensorFlow, Keras, PRAW, Streamlit

- Developed and deployed a Sarcasm Detection web application utilizing 2D-input Basic and LSTM Keras Sequential models, achieving 96.7% same-distribution test accuracy
- Improved existing sarcasm detection methods by incorporating contextual information from comments paired with the title of the post they responded to, resulting in more accurate predictions
- Collected and processed data from the r/politics subreddit using the Python Reddit API Wrapper (PRAW), extracting more than 2,200 sarcastic comments for training the model as well as generating 2,000 more with the GPT-3.5 Large Language Model

Awards

Presidents' List (5x), The University of Texas Rio Grande Valley

1st place in Hack Research 2022, Major League Hacking, The University of Texas Rio Grande Valley

3rd place in Mathematics & Engineering, High Scholars Program, The University of Texas Rio Grande Valley