
Diversely experienced Computer Science and Statistical Science student with over 3 yrs. of research experience in applied data science for full-stack software applications, seeking a research lab position that will align with interests to become a future Ph.D. student.

EDUCATION

SOUTHERN METHODIST UNIVERSITY, Dallas, Texas

(Fall 2019 - Spring 2023)

Major – Bachelor of Science in Computer Science

Bachelor of Science in Statistical Science

Minor – Mathematics

SKILLS

TECHNICAL SKILLS:

Languages: **Python, R, C++**, Java, SQL(MySQL), JavaScript, HTML, MATLAB, SAS, SPSS, LaTeX

Environments: **Git, Linux, Windows**, Anaconda, Docker, AWS, DevOps

Frameworks: **Keras, TensorFlow**, Android Studio, ReactJS, NodeJS

COURSES:

Machine Learning, Data Mining, Statistical Computing, Time Series Analysis, Algorithms,

Data Structures, Software Architecture, Databases, Graphical User Interfaces

IT CERTIFICATIONS:

CompTIA Linux+, AWS Solutions Architect, Microsoft Office Professional

CAREER HISTORY - Experience:

Global Medical Consultancy Inc. TX – Software Developer (Part-time)

(May 2019 - Present)

Home Security System: Implemented a real-time, machine learning facial recognition system on an IOT network, capable of detecting, alerting, and logging and viewing unauthorized entrants. The system uses ESP-32 microcontrollers to perform facial recognition and match against 'Friends & Family' database, it sends a real-time SMS text for any unauthorized people and analyzes who enters at each time and provides a weekly dashboard of occurrences on a local website.

SMU AT&T Center for Virtualization – Research Assistant

(Dec 2020 – June 2022)

Deep Learning Avionics Application on Stress (Python): Deployed real time cognitive stress detection system for pilots during flight maneuvers. Created biometric pipeline sourcing from industry grade hardware sources. Designed and deployed a Docker container of the model to be streamed real-time from an E4 wristband's biometric data to output the level of stress at different points during a maneuver.

SMU Darwin Deason Institute of Cyber Security – Research Assistant

(June 2022 - Present)

Applied Machine Learning in Mobile Application: Designed full-stack operation of biometric two-factor authentication of mobile app users. Lead deployment of ML algorithms for streamline training of biometric data, cloud computing for storage and offline analysis, and Docker for distribution and testing.

PUBLICATIONS:

Real-Time Situation Awareness Assessment for Pilots via Machine Learning (MODSIM 2022): The research presented here demonstrates the diagnostic value of real time and objective measure of Situational Awareness (SA) by employing a mix of biometric data streams gathered from wrist-worn and eye tracker devices. These biometric data streams are built on our existing performance data from previous works that assessed pilots' SA performing a high-altitude intercept mission.