Geralt Heart

Austin Tx| geraltheart01@gmail.com | 956-802-1359 | github.com/GHeart01 | linkedin.com/in/geraltheart001 | geraltheart.com

EDUCATION

University of Colorado Boulder |GPA: 3.9	***Expected May 2027***
Master of Science in Computer Science	Boulder, Co
University of Texas Rio Grande Valley |GPA: 3.5	***July 2017 – May 2020***
Bachelor of Science in Applied Mathematics	Edinburg, Tx
Blinn College |GPA: 4.0	***June 2024 – December 2024***
Associates of Science in Computer Science	Bryan, Tx
South Texas College |GPA: 3.5	***Aug 2014 – December 2017***
Associates of Science in Engineering	McAllen, Tx

PROJECTS

Regression Testing Framework| *python, pytest, GitHub Actions*
https://github.com/GHeart01/tile-gps-regression-testing

- Designed 52 regressions tests covering 4 system modules (TILE, EMQuest GPS, Spectra Python, and Aurora systems) achieving 100% test validation in 0.08 seconds.
- Validated Android GPS module functionality including location accuracy, signal strength, and RTK/DGPS compatibility.
- Implemented python 3.9+ integration tests for ancillary state and data persistence, data serialization, JSON validation, and configuration management
- Created CI/DI pipeline using GitHub actions with automated testing, coverage analysis, and multi-version support

Customer Segmentation & Clustering Analysis| *NumPy, pandas, seaborn, matplotlib, TensorFlow*
github.com/GHeart01/Wholesale_Customer_Clustering

- Built a customer segmentation pipeline using KMeans and Hierarchical Clustering to identify purchasing behavior patterns.
- Evaluated clustering quality using silhouette scores between cluster counts.
- Provided heatmap/pair plot visualizations to display data.

SMS Spam Detection Analysis – Deep Learning | *NumPy, pandas, seaborn, matplotlib, SciPy*
github.com/GHeart01/SMS-Spam-Collection-Deep-Learning

- Data engineered features from raw data to gain better pivot points for analysis.
- Compared deep neural networks and LSTM models to provide basis on decision making.
- Improved model performance and viewer-accessibility through visualization and log-transformed feature analysis.

WORK EXPERIENCE

Guest Teacher	***Aug 2025 – present***
Kokua Education	Austin, Tx
Mathematics Tutor	***Sept 2018 – June 2024***
South Texas College / Freelance	McAllen, Tx

- Performed one-on-one and group instruction for mathematics and statistics courses including College Algebra, Calculus I, II, III, Elementary Statistics, Differential Equations, and other mathematics classes.

SKILLS

Languages: Python, SQL, C++, JavaScript, MATLAB
Machine Learning & Data Engineering: Pandas, NumPy, Scikit, TensorFlow, Keras, SciPy
Libraries: React, pytest, Three.js, gsap
Databases & Tools: PostgreSQL, Docker, Git, GitHub, AWS Lightsail, Bash