Evan Denholm-Chapman

Sheffield, England, United Kingdom

e.endless.yt@gmail.com | 07588018477 | linkedin.com/in/evandc | github.com/EvanDevelopments

EDUCATION

King Edward VII School**, Sheffield, England, United Kingdom* ***Sep.2023-Jun.2025

A-Levels: Computer Science, Mathematics, Further Mathematics, Economics, Extended Project Qualification (Quantum Computing)

Handsworth Grange Community Sports College**, Sheffield, England, United Kingdom* ***Sep.2018-Jun.2023

GCSES: A*s/A, Biology (9), Chemistry (9), Physics (9), Business (9) (D*), English Speaking (9) (D*), Math (8), Statistics (8), Computer Science (8), History (7), English Literature (7), English Language (5)

EXPERIENCE

Arm,** Software Engineer Internship (Python), Sheffield, England, United Kingdom* ***Mar.2024-Apr.2024

- Led a team of software engineers in a structured development process to design and implement a Python-based satellite telemetry system using micro: bits, collecting real-time position and speed data to determine optimal parachute deployment timing.
- Engineered efficient Python algorithms on micro: bit devices to process telemetry data with high accuracy, enabling reliable decision-making in critical mission scenarios.
- Collaborated cross-functionally to integrate micro: bit hardware with satellite systems, ensuring robust performance and system reliability under real-world conditions.

Starbucks,** Barista, Sheffield, England, United Kingdom* ***Oct.2023-Jan.2024

- Delivered fast, high-quality service in a high-pressure environment, honing time management, multitasking, and adaptability.
- Handled cash and digital transactions with precision, strengthening attention to detail and reliability.
- Collaborated with a diverse team to optimize workflow and achieve daily goals, developing teamwork, collaboration, and communication skills.
- Resolved customer concerns effectively, demonstrating problem-solving, conflict resolution, and empathy.
- Maintained consistency and quality under stress, building resilience, accountability, and work ethic.

PROJECTS

F1 Race Outcome Prediction** – Random Forest (Python, scikit-learn, ML)* ***Aug.2025-Sep.2025

- Developed in Python using Pandas, NumPy, and scikit-learn to clean, preprocess, and merge ~50,000 historical race, driver, and constructor records, handling missing values, converting lap times, and assigning DNF positions, improving dataset consistency for modeling.
- Engineered features including driver stats, constructor performance, grid position, laps, and fastest lap times using Pandas and NumPy, increasing model ±1 position prediction accuracy from 37% to 74%.
- Built and trained Random Forest Regressor models with scikit-learn, leveraging RandomizedSearchCV and a custom ±1 position scoring function to optimize hyperparameters, achieving RMSE of 1.35 and R^2 of 0.78 on the test set.
- Automated data preprocessing, one-hot encoding, feature engineering, and model evaluation pipeline entirely in Python and scikit-learn, enabling scalable predictions and reproducible results across F1 race datasets.

COVID-19 US Infection Time-Series Visualization (Python, Pandas, GeoPandas) ***Jun.2025-Jul.2025***

- Processed and merged ~3 million COVID-19 records with 3,142 US county shapefiles in Python using Pandas and GeoPandas, enabling county-level pandemic tracking across the US.
- Generated frame-by-frame choropleth maps with Matplotlib and Mapclassify, compiled into an animated GIF with ImageIO, providing week-by-week visual insights for over 3,000 counties.
- Optimized frame generation using Joblib parallel processing and NumPy, reducing runtime by ~80% for 200+ frames.
- Implemented configurable FPS, DPI, frame interval, and dark-mode aesthetics, and automated in-memory frame handling and cleanup, improving reproducibility and storage efficiency.

SKILLS

Programming languages: Python, Java, HTML, CSS, JavaScript

***Computer software / libraries / frameworks:** PyTorch, OpenCV, Pandas, GeoPandas, Matplotlib, Plotly, scikit-learn, NumPy, Multiprocessing,*

***Languages:** English (Native)*