

DALTON PAYNE

daltonpaynedeveloper@gmail.com | +1 863 664 0047 | Sebring, FL
daltonpayne.dev | linkedin.com/in/dalton-k-payne | github.com/DaltonPayne

EDUCATION

Nova Southeastern University | Fort Lauderdale, FL 2024 – 2026
Master of Science, Data Analytics & Artificial Intelligence

University of Central Florida | Orlando, FL 2018 – 2024
Bachelor of Science, Biomedical Science

EXPERIENCE

Founder & Developer | Menova AI Aug 2023 – Present

- Developed first AI-powered brain-computer interface app on iOS App Store
- Built machine learning pipeline for real-time EEG and fNIRS brain signal processing
- Created features including custom neurofeedback, 3D brain visualization, and model training
- Implemented on-device processing to ensure user privacy and data security

menovaai.com

Environmental Specialist II | Florida Department of Health Sep 2025 – Present

- Conduct environmental health assessments and data collection for public health programs
- Analyze environmental data to identify health risks and develop recommendations
- Maintain databases for environmental health surveillance

Adult Education Instructor | South Florida State College Nov 2024 – Jul 2025

- Delivered instruction in adult education programs for diverse learners
- Developed lesson plans and assessments tailored to student needs

Research Assistant | University of Central Florida Sep 2023 – Feb 2024

- Developed analytical models for genomic data analysis
- Automated data preprocessing workflows using Python

DATA COMPETITIONS

Trojan Horse Hunt in Time Series Forecasting | Top 16%
European Space Agency Competition

- Analyzed satellite telemetry data to detect anomalous patterns in forecasting models
- Applied statistical methods to identify security vulnerabilities in time series data

arxiv.org/abs/2501.15768 | kaggle.com/competitions/trojan-horse-hunt-in-space

CMI - Detect Behavior with Sensor Data | Top 8%, Bronze Medal

- Analyzed wrist-worn sensor data to classify behavioral patterns
- Processed movement, temperature, and proximity sensor streams

kaggle.com/competitions/cmi-detect-behavior-with-sensor-data

FlightRank 2025: Aeroclub RecSys Cup | Top 21%

- Built flight recommendation system for business travelers
- Developed ranking algorithm based on pricing, timing, and user preferences

kaggle.com/competitions/aeroclub-recsys-2025

RSNA Intracranial Aneurysm Detection

- Built deep learning pipeline for 3D medical image analysis

kaggle.com/competitions/rsna-intracranial-aneurysm-detection

ADDITIONAL PROJECTS

Movie Data Analysis and Prediction

- Analyzed 16,000 movies with visualizations and predictive modeling

github.com/DaltonPayne/Movie-Data-Analysis-and-Prediction

Reddit Sentiment Analysis for Tech Stock Prediction

- Analyzed Reddit sentiment correlated with tech stock performance

github.com/DaltonPayne/Reddit-Sentiment-Analysis-for-Tech-Stock-Prediction

TECHNICAL SKILLS

Languages: Python, R, SQL

Tools: Tableau, pandas, numpy, scikit-learn, Excel, BigQuery

Skills: Machine Learning, Statistical Analysis, Data Visualization, ETL, Time Series Analysis

PROFESSIONAL DEVELOPMENT

DataCamp Career Tracks: Machine Learning Scientist in Python (85 hrs), Associate Data Scientist in Python (90 hrs), Data Analyst in Python (36 hrs), Associate Python Developer (32 hrs), Python Developer (28 hrs)

CERTIFICATIONS

Data Analyst Associate – DataCamp (Feb 2025)

Google Advanced Data Analytics – Google (Jun 2023)

Google Business Intelligence – Google (May 2023)

Google Cybersecurity – Google (May 2023)

Google Data Analytics – Google (May 2023)