Timothy-Joseph Godwin

Birmingham, UK | tj.godwin1904@gmail.com | +44 7961 585 772 | LinkedIn | GitHub

Education

University of Birmingham

M.Eng Computer Science with Software Engineering

Sept 2023 - present

Birmingham, UK

• Relevant Coursework: Full Stack App Development, Object Oriented Programming, Data Structures & Algorithms, Software Engineering and Professional Practices, Functional Programming, Artificial Intelligence

Kaplan International College, London

Foundation Certificate in Science and Engineering

Jan - June 2023

London, UK

• Relevant Coursework: Mathematics, Information Technology, Extended Project

Experience

London Success Academy

Sept 2025 - present London, UK

Data Engineering Intern

- Built enterprise-scale ETL pipeline processing 300,000+ records using Python, Apache Spark, and GCP, achieving 80% storage optimization through Parquet format with real-time API integration
- Orchestrated production data workflows using Apache Airflow on Google Cloud Composer with automated scheduling, BigQuery metadata tracking, and data validation ensuring 99%+ pipeline reliability
- Designed BigOuery data warehouse with partitioned/clustered tables processing \$15.3M transaction volume across 5 currencies, implementing query optimization reducing costs by 80% through partition pruning
- Deployed distributed Apache Spark processing on GCP Dataproc cluster, scaling from single-machine to 3-node architecture, processing 95,000+ clickstream events and 50,000+ financial transactions with zero data loss

Uptrail

Data Analysis Intern

July 2025 - Aug 2025

- London, UK
- Cleaned and analysed 2,992 sales records across 499 customers to identify top loyalty tiers and delivery optimisation opportunities (41% delay reduction potential) through 6 data visualisations and strategic analysis
- Built Scikit-learn logistic regression model on 1,494 streaming customers achieving 76.6% accuracy, identifying mobile usage and geographic patterns as key churn drivers for targeted retention strategies
- Designed interactive Tableau dashboard integrating 3 datasets (15,822 records) with 6 calculated KPIs, enabling executive strategic planning through geographic mapping and customer segmentation analysis

Projects

Campus Events Web Application

JHipster, Angular, PostgreSQL

- Developed a full-stack web application for university students to discover and review campus events and societies as part of a 7-member team using Agile methodologies
- Led CI/CD pipeline implementation using Azure for deployment, Docker containerisation, and GitHub Actions runners
- Architected RESTful APIs with Spring Boot and resolved database migration issues using Liquibase

Network Firewall Program

C. Networking, Threading

- Designed multithreaded firewall server using pthreads with mutex synchronisation, supporting concurrent client connections and dual-mode operation (interactive CLI and IPv6 network server)
- Built linked-list rule management system supporting Add/Delete/List/Check operations for IP and port filtering
- Developed IP validation using inet pton() and byte conversions for precise range matching and connection control

Technical Skills

Programming Languages: Python, Java, JavaScript, TypeScript, C, Haskell, PowerShell

Data Analysis & ML: Pandas, Scikit-learn, PyTorch, Tableau, Data Visualisation, Predictive Modeling

Web Technologies: React, Angular, Spring Boot, HTML/CSS, Bootstrap, Express.js, Node.js Databases & Tools: SQL, GCP, AWS, Docker, Azure, WSL, JHipster, Vercel, GitHub, BigQuery

Additional Information

Languages: English (Fluent), Igbo (Basic), Spanish (Learning)

Achievements: 2023/24 UG Outstanding Achievement Award (SRM Funded); Silver medallist in state-level Physics and Mathematics Olympiads; Top 3 graduating student & Best Student in Further Mathematics (British Spring College)