+44 xxxx xxxxxx www.samwilliamellis.com www.github.com/sam4llis

### Experience

#### Delivery Analyst — Experian, Remote

Mar 2024 — Present

Internal promotion. Cloud-based data engineering:

- Data ingestion spearheaded the development and modernisation of data ingestion pipelines on cloud-based technologies, contributing to the strategic standardisation of the UK&I technology estate.
- **Stakeholder communication** maintained clear and concise communication with stakeholders, ensuring alignment on project goals and delivery expectations.
- Pipeline development developed CI/CD pipelines using Harness, shell scripting, API integrations, and Artifactory for automating the promotion of code and cloud infrastructure into test and production environments.
- Scrum master responsibilities led daily scrum meetings and represented the team in interdepartmental meetings.
- Mentorship and support provided guidance and mentorship to new team members, including apprentices, to support onboarding and development.

## Graduate Data Engineer — Experian, Remote

Sep **2023** — Feb **2024** 

Completed a successful graduate rotation in the Ascend Data Science Team:

- Version control modernisation migrated team projects to Git and Bitbucket, significantly enhancing revision control practices and collaboration. This reduced codebase drift and aligned internal environments with client cloud platforms, streamlining deployments, and accelerating delivery through CI/CD.
- **Internal tooling** —developed a reusable Python toolkit for internal and client use, standardising common functionality and streamlining workflows across internal and client-facing projects.
- Automated backend workflows leveraged AWS services (EMR, Glue, Lambda, SQS, SNS) to build event-driven data delivery processes for stakeholders.

### **Graduate Data Analyst** — *Experian, Nottingham*

Sep 2022 — Aug 2023

Completed two successful graduate rotations in the Data Insights Team and Business Data Team:

- Automation streamlined data workflows and internal reporting with Snowflake, significantly reducing manual efforts and human errors in the process.
- Data visualisation designed, developed, and maintained interactive Tableau dashboards for internal stakeholders to support next financial year strategies.
- Tooling developed tools to convert semi-formatted textual data into JSON for Splunk, enabling effective visualisation of this data.

## Education

# MSc Computer Science — University of Nottingham

Sep **2020** — Dec **2021** 

Graduated with distinction (first-class equivalent).

**Modules include:** MSc Research Project; Conceptual Programming; Data Modelling and Analysis; Databases, Interfaces and Software Design Principles; and Systems and Networks.

## **BEng Chemical Engineering** — *University of Birmingham*

Sep **2017** — Jun **2020** 

Graduated with first-class honours.

**Modules include:** Mass, Heat and Momentum Transfer; Principles of Process Control; Process Integration and Unit Operations; Product Design Exercises; and Sustainable Process Engineering.

# Skills

## Tools

Languages

**Continuous Integration/Deployment** — Artifactory, GitHub CI, Harness

Proficient — Python, SQL

**Tooling** — Airflow, Snowflake, Spark, Splunk, Tableau **Platform** — AWS, GCP

Familiar — jq, Go, Lua, Shell Scripting Working Knowledge — JavaScript

**Revision Control** — Git, GitHub

Web — CSS, HTML, Next.js, Tailwind

## **Projects**

MSc Research Project — Focused on 'Predicting Keystrokes using an Audio Side-Channel Attack and Machine Learning', this project developed a keylogger to map keystroke signals to their emanation to create a supervised dataset. Multiple datasets were evaluated using state-of-the-art machine learning approaches, achieving up to an 89% keystroke recovery accuracy from a 40-key classification problem. The research introduced a novel cross-prediction method that significantly enhanced keystroke identification rate.