

Home Office 2021: Data Fellowship

Amy Tyley | BA Criminology

Overview of the Data Fellowship

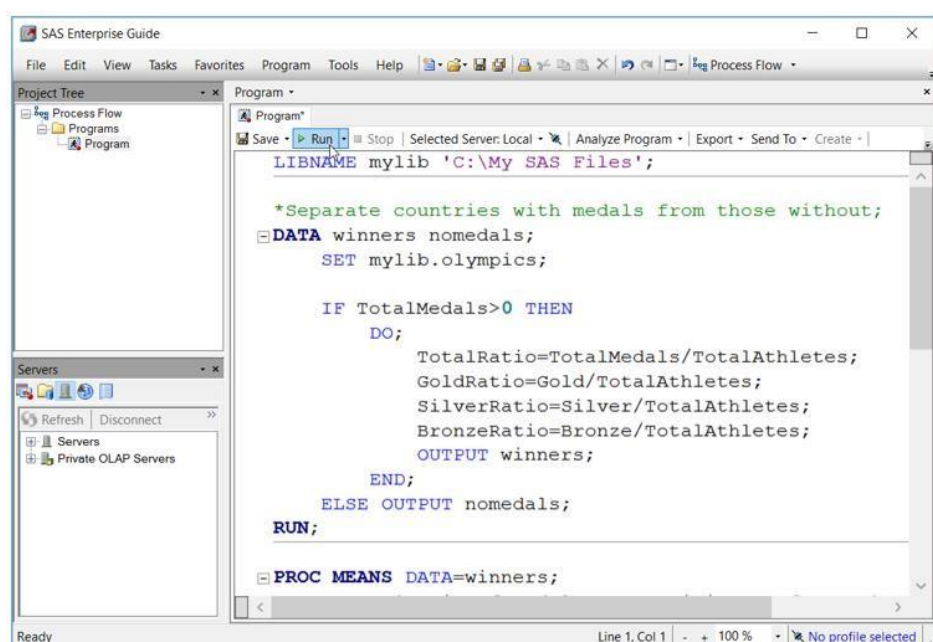
For my 2021 remote data fellowship I spent 8 weeks working with the Protection, Asylum and Resettlement Integration team within the Home Office. I worked on one large data analysis project for the duration and had the opportunity to engage in many other roles throughout my time there.

- I led an anti-racism training session for the wider team of around 30 people and volunteered to take meeting minutes for the monthly department board meeting. I learnt so much in such a short space of time and am very grateful for the responsibilities I was trusted to take on.
- I also set goals with my line manager to achieve by the end of the 8 weeks. I wanted to know what I want to do postgraduation- I always knew I wanted a role within the government and after having 15+ meetings with colleagues across all departments and even some outside of the Home Office, I have signed up for a specific job alert on civil service jobs to get myself set up ready for after university.

Data Analysis

For the data analysis of my project, I used SAS and Excel to filter a very large dataset (180,000 rows), into a more manageable and appropriate cohort of customers for my research question.

- Using migrant journey data over the past decade, I studied the renewal journeys that migrants typically follow and what patterns may exist with these journeys i.e. likelihood of switching routes at certain times.
- Although I had never used SAS before, it used the same SPSS coding structure that I had experience with from my university courses. The Home Office provided me with several training courses and introductory videos before beginning the analysis, to boost my confidence and consolidate my knowledge.
- Some of the new code I learnt included, using the lag function, left-joins and 'if-then' statements. My task was to go away and learn these before coding them to the data, all code used for analysis was written from scratch.

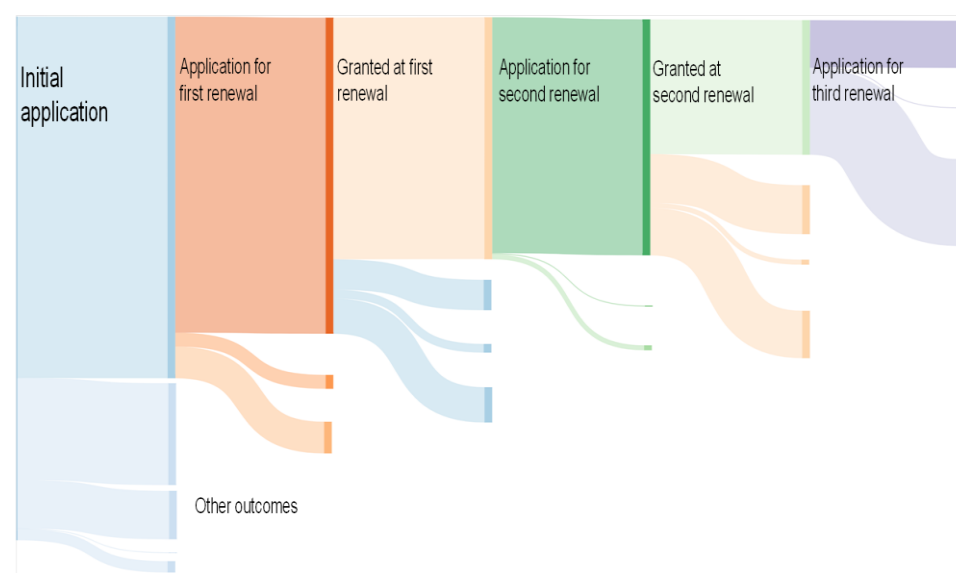


An example of the SAS coding software used (not my code).

Findings

One of my *favourite* parts of the data fellowship was being able to present my work to the department and show just how hard I had worked over the previous 8 weeks.

- I put together a word-report and a summary PowerPoint presentation explaining the decisions made during the analysis, why they were made and how they further impacted our results/ability to answer the research questions. To design the report, I was introduced to software called Visio and SankeyMatic to help pull diagrams together, showing off our analysis.
- At the end of my internship, I delivered the presentation to my analytical team and also the wider operational and policy unit. It was a 30-minute presentation allowing a further 30-minutes for questions.
- Although my original research question wasn't a commissioned piece of work, following the presentation it was requested that the project summary and report were to be sent across to my analytical team colleagues, by the Head of the operational and policy unit. This ensures the team could pick up complementary analysis once I had left the data



The non-sensitive Sankey diagram produced to demonstrate my research analysis.

Key Skills Learnt

My data fellowship taught me so much, not just analytical skills but general life skills and the importance of being able to adapt to the working environment.

- One key skill I picked up was the ability to judge when appropriate to ask for help, a skill I never thought would need to be learned. I now understand the importance of working productively, and sometimes it's not an appropriate use of my time to sit, trialling and erroring code for hours when my internship time is limited, and I have SAS Software experts on my team.
- I didn't go into my fellowship with any specific expectations, but it has definitely been a very enlightening process into the demands of the world of work, grossly improving my adaptability skills. I have a newfound appreciation for working under time constraints and being able to prioritise tasks- a thoroughly enjoyable data fellowship.