Thomas Cussons:

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My keen interest in Mathematics and Statistics shows that I am well suited to tackle any problem given to me in a logical and thought-out manner. I have been working in Analytics within the Banking industry since 2016.

Recently moved to the US on a K1 visa, Employment Authorization Document approved and in hand - no sponsorship needed.

Work Experience (HSBC):

Manager Fraud Analytics (Global): March 2023 – November 2024

The role within Fraud Analytics involved working with the regional teams across the globe to implement fraud rules within SAS EFM and Feedzai (FZ) systems to efficiently challenge and review any suspect transactions. I quickly became the payments SAS EFM and FZ data expert for multiple regions. Key projects are as follows.

Deep data analysis and architectural solutions for the incoming FZ transition, my recommendations & transformations are being implemented in the UK and also becoming a "day 1 requirement" for all upcoming FZ deployments. This has a *conservative* cost saving of ***half a million dollars annually per product per region.***

Reducing False Negative rates for Hong Kong, China, Australia, Mexico, UAE, UK and US teams using self driven analysis for key variable indicators across the regions. Resulting in an average False Negative reduction of 18%.

Implemented crypto policy rules for UK and US

Gave accurate and detailed global data samples across all regions for audit.

Decommissioned all relevant UK EFM rules without effecting other products & regions

Set up a model monitoring report for the R6 regions

Created a money mule network code within python

Lead Risk Analyst (Loans Portfolio): October 2021 – March 2023

Upon taking the lead role within the Loans Portfolio team I continued to lead and monitor the First Direct CNS Migration, answering any strategy queries or concerns that were brought up.

I also led a "revamp" project for the HSBC strategy which involves redesigning and streamlining the loans strategy and functional specs with the aim of making the full process easier and to enable alignment across all brands in future changes.

Alongside both above projects, I also helped mentor and train new starters with SAS and how process work within the team. I was also tasked with creating a SAS technical coding test to be used during the recruitment process to help determine if a candidate has the right logical thinking ability to be able to code.

Senior Risk Analyst (Loans Portfolio): March 2021 – October 2021

From moving to the loans team, I delivered several strategies change requests across different brands, showing my attention to detail and thorough analysis in both code and data. I was also an active member in dealing with inbox cases, in which I respond to customer queries in regard to complaints, APR reviews and application decisions. I took it upon myself to create a template to handle these queries in a much more efficient manner, also ensuring consistency for each customer.

I have also picked up and helped deliver the First Direct CNS migration (application process moving from one system to another), which involved User Acceptance Testing, and assisting with ensuring the strategy and journey is working correctly for new loan applications.

Senior Risk Analyst (Financial Modelling): September 2019 – March 2021

During my time on Financial Modelling, I lead a large project for credit cards called Sherwood 3.UK, this project involved completely redesigning the Sherwood process and amending the team's way of work. Due to this, I completely re-wrote and streamlined the code to pull all of the Sherwood data (in SAS), created a new monitoring pack to feed in and display the data more efficiently (Using Excel and VBA), added several enhancements and regulatory compliances (IFRS9, Basel 2020 etc.) to the pricing model whilst also simplifying the mechanics (Excel) & written documentation for each part of the process (Word and OneNotes). During the 3.UK project I had to give regular updates to several stakeholders whilst also teaching my team the new processes.

I also assisted and helped recreate a new RAS and COG (Cut-off Governance) process – both involved complex pieces of analysis and explaining them to senior level managers showing the benefits and robustness of the new processes that I made.

Credit Risk Analyst: June 2018 – September 2019

During my time on the Pricing team, I completed several large high priority projects such as setting the ALR Guardrails for M&S Credit Cards and OpCo for all brands on Credit Cards. I was chosen to deliver these projects due to my high level of understanding on these products and the high level of stakeholder management they required.

Student Risk Analyst: July 2016 – June 2018

On my year placement (July 2016 – July 2017) at HSBC I worked as an analyst for the pricing team in the retail risk analytics department. I initially took ownership of monitoring the HSBC credit card assumptions; this involved modelling behaviours based upon past acquisitions to predict how new customers will behave. I then presented and explained the changes in the assumptions to various stakeholders to show how the profitability of the product changed. From this, I developed my communication skills and have since been praised on changing my presentation style and using the appropriate amount of detail for the target audience.

I then took on larger projects, such as CRD IV model changes for various products, several incentive campaigns, and cut-off refreshing.

Due to my performance during my placement year, I was offered, and undertook, a part time role whilst I completed my studies (a first within the placement programs at the organisation). This role was a continuation of my previous role, in which I had several streamlining and optimisation projects.

Effectively managing my time between my part-time job and my undergraduate degree shows that I have very good time management skills as I prioritised the tasks at hand around the work and university hours. One example of this is when I saved less time-consuming jobs at HSBC for the days where I was only working 3.5 hours. I also showed a great level of organisational skills by having regular discussions with my line manager about university commitments and if my working hours needed to be changed.

Technical Competencies:

SAS – Achieved SAS certification, and become highly proficient within this language, such that I then became a member of the SAS academy to train new starters within HSBC. (See also: SQL, VBA and Python)

SQL – I delivered and trained new starters in HSBC on how to utilise SQL within SAS. This is fully delivered between myself and one other colleague.

Python – I created a "SAS to Python" guide, based upon the standard SAS learning journey, to help transition analysts between the two coding systems. This guide had relevant dummy examples in self taught lessons showing the pros and cons of each method. It concluded with a self marked assignment. This guide was presented and demonstrated to hundreds of colleagues across all regions.

Excel & VBA – I have shown a high level of competence in Excel and Excel VBA. My final year project in University was praised for the level of detail included whilst maintaining a relatively simple user experience through the use of user forms. I used my knowledge here to create a VBA training guide for selected teams within HSBC.

SAS EFM – I quickly became an expert within SAS's Fraud Management system due to my prior knowledge of base SAS code. I was able to set up multi-level complex rules and variables to best assist each region.

Education:

Sept 2014 – June 2018:

Sheffield Hallam University - BSc (Hons) Mathematics (Statistics)

Data Mining with Business Applications: This module utilised SAS Enterprise Miner to explore several techniques to reduce the amount of data needed to predict any desired variable. During this module, various summary measures of models were explored, along with their complexity, to find the most suitable model.

Statistics for Business and Industry: Two key subjects were studied within this module: time series analysis and experimental design. Meaning that this module talked about: the most efficient techniques to set up an experiment and interoperate the results; and how to create a time series model to predict future values.

Statistical Inference: This module explored the theory behind any statistical tests and discussed the different techniques in order to interoperate and analyse given data. One main debate throughout this module was the differences between frequentist and Bayesian techniques.

Project – Evacuation simulation using Cellular Automata: My chosen final year project was to build a cellular automata model in excel to simulate how people evacuate a building in any given scenario. This model was built in Excel VBA and took into consideration various factors such as level of panic and the politeness of people.

Sept 2007 – July 2014:

4 A Levels (Maths, Economics, General Studies, Further Maths) & **13 GCSEs (A-C):** including Mathematics, English and Duo Science