# Phoebe Badcock

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Location: Milton Keynes, Buckinghamshire

#### **Relevant Skills**

Python – Low Intermediate



JavaScript - Novice



HTML/CSS - Novice



PostgresSQL - Intermediate



### Introduction

As a university graduate with **three years of valuable work experience in a fast paced start up**, I have embarked on a transformative journey into the world of programming and automation, largely self-taught in my own time.

My exploration of **Python and web development** for a recent project ignited an unexpected passion. I took the initiative to delve into **independent research**, which unveiled a myriad of automation possibilities. Consequently instilling in me an eagerness to explore and understand the vast potential of this field and apply aspects to solve real world problems.

My **educational background in mathematics** has equipped me with a sharp aptitude for logic, enabling rapid skill acquisition. I am driven towards a career in this dynamic and ever-evolving realm due to the boundless opportunities it offers.

### Education

# University of Warwick, Mathematics BSc (2017-2020)

- First Class- Bachelor of Science (with Honours)
- Notable Module scores:
  - o 82% Maths by Computer
  - o 80% Abstract Algebra
  - o 87% Rings and Modules
- Other modules included:
  - o Java Programming and Logic
  - Mathematical Analysis and Statistics

# **Trent College,** Nottinghamshire (2010-2017)

- A Levels:
  - A\* Mathematics
  - A\* Further Mathematics
  - A Physics
  - A Chemistry
  - o A Biology (AS Only)
- GCSEs: 6A\*, 5A

# Experience

#### Senior Strategic Analyst, Snap Finance

(January 2023 - Current)

#### **Building Analytics Dashboard**

- Converting an analytics dashboard, originally written in Angular, to **Python** using a package called Zendash which utilises Flask and FastAPI to host the application.
- Demonstrated strong problem-solving skills by dissecting functions and classes within the **GitHub** demo for Zendash to understand their functionality along with studying the documentation to ascertain the possibilities of the package.
- Self-learned through **independent research** to comprehend the roles of various functions and modules, in an effort to break down long scripts into solvable parts by focusing in on the sections of unfamiliar code, then applied acquired knowledge to develop my own custom classes, to replicate the desired dashboard.
- Identified the CSS classes acting on different elements, facilitating the creation of a tailored CSS stylesheet to format graphs, tables and filters on the dashboard to align with company branding, enhancing visual presentation.
- Manually tested the data against other sources to ensure correctness and accuracy, making adjustments where
  necessary then continuously monitoring to identify any anomalies before deploying updates.

#### Acceptance and Regression Testing Automation

- Recognised the need for automation due to the labour-intensive nature of manual testing and its impact on testing speed and capacity, there-by saving up to six hours of work per change and improving productivity.
- Implemented **test automation** using the **Selenium Python framework** and WebDriver, then acquired element full XPaths and IDs to specify sections of the webpage to interact with. Applied WebElements to navigate the page and enter the required information, including the SMS two factor authentication code in the network response.

#### **AWS Data Management**

- Utilized AWS S3 buckets for efficient storage, security and management of customer data.
- Recognising developers' ability to create automated processes through AWS, I established a system for
  uploading current customer data to the data management area, which then facilitated real-time integration into
  the customer database, allowing existing customers to be decisioned before their subsequent applications. This
  initiative resulted in a significant increase in overall approval rates, achieving growth of up to 15%.

#### Credit Risk Analyst, Snap Finance

(September 2020 - December 2022)

#### Portfolio Customer Outcome Review

- A review of all customer outcomes over the five year history of the company was required due to FCA regulations. The task at hand required an in-depth review of customers' information at point of application, repayments of their loans with Snap Finance and external financial accounts.
- Attacking this substantial challenge, I dismantled this project into manageable components, by identifying
  data sources, including customer application data, retroactive data and both internal and bureau loan records.
   Created organised documentation for the process as it was essential to have extreme clarity for any future
  review and be easy to navigate for colleagues who need to fully understand the code, data and outcomes.
- Grouping relevant data fields from each source, I analysed the current customer information, then conducted
  further research on how to improve the accuracy for specific data sectors to prove, unquestionably, that Snap
  Finance had not caused a bad outcome for a set of previously borderline customers.
- The conclusion, £5 million saved in costs, and the FCA was fully satisfied with our customer outcomes.

#### Resolving Customer Lending Disputes

- Proactively assumed the role of evaluating customer application data to determine loan affordability when a
  customer raises a complaint. Recognised inefficiencies in the initial process, where each complaint review
  consumed several hours daily for myself.
- Demonstrated initiative by devising a solution independently and seeking advice from experienced managers
  where necessary. Crafted a sophisticated SQL script to consolidate crucial data from multiple tables to
  construct a materialized view, then linked this to data visualisation platform, Tableau, and set up to refresh daily.
  This presented key application information clearly by filtering the data to the required customer using their
  internal ID, allowing colleagues from other departments to review the decision.
- This reduced the assessment time to under a minute, ensuring decisions were both compliant and accurate.

## Interests

- Completing Python and Web Development Courses by Mimo and 100 Days of Python on Udemy. Practicing
  acquired Python skills by creating games, solving algorithmic problems like randomly generated mazes, and
  exploring additional language applications to integrate into work for efficient, accurate, and productive solutions.
- Committed **hockey player** for Milton Keynes Women's 1<sup>st</sup> team, achieved promotion with the 2<sup>nd</sup> team last season, taken part in every match in 2023, also play for the summer league team and mixed hockey team.
- Enjoy hiking trips, this year I have travelled to the peak and lake districts, Switzerland, Lichtenstein and Andorra.
- Closely follow **Formula 1**, with a keen interest in race strategy, where factors like track surface, altitude, and weather significantly influences tire life.