Fanzhou Liang

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### Profile

*Diligent and motivated bilingual Data Scientist with* excellent *analytical skills and a strong desire for self-improvement.*

### Technical Skill

* Highly numerate, excellent data-wrangling ability.
* Advanced data visualisation
* Geospatial data handling and processing
* Data pipeline creation
* Natural Language processing and text handling.

### Soft Skill

* Proactive self-learner
* Driven to find solutions to complex problems.
* Team player
* Story telling with data

### Tools

**Development Tools**:

* VSCode
* Github

**Programming Language**:

* R (expert developer)
* SQL (advanced user) {PostgreSQL} {PostGIS}
* Python (intermediate user) {Pandas} {Vega-Altair} {ibis}
* Julia, Scala (basic user)

**Softwares**

* Microsoft Excel,
* TensorFlow
* Delta Lake
* Apache Spark

### Professional Experience

**Full Fibre Limited** | Exeter, UK

*Data Analyst* July 2022 - present

* Responsible for leading and delivering technical project work for the Data and Analytics team
* Extensive use of R, PostgreSQL and PostGIS for data wrangling, visualisation and geospatial analysis
* Delivered Full Fibre’s data-driven financial reporting
  + Wrangled and united several relational tables to form a single summarised view for the finance department. This product is key to financial reporting.
  + Extensive data cleaning, data validation and stakeholder engagement
* Automation of reporting
  + Automated the monthly service billing, annual carbon footprint, and weekly build reports.
  + This automation was primarily achieved through PostgreSQL and R-markdown
  + Implementation of strict unit tests to ensure accuracy and robustness of results.
* Designed and implemented a fibreoptic network dynamic visualisation tool.
  + Applied graph theory and dynamic visualisations to create an interactive network interrogation tool.
  + This product allows fibre planners to see a schematic representation of the network – quickly highlighting poor design quality and disconnected apparatus.
* Prototyped the company’s initial fibre routing report and data validation strategy.
* Actively participated in internal code reviews to ensure accuracy of output and quality of coding in the team
  + As part of this, co-piloted with colleagues on several high-impact projects
* Designed and delivered a comprehensive introduction to SQL training course for non-technical colleagues throughout the business. This course was extremely well received with attendees starting to use SQL for simple self-serve tasks.
* Assisted in due diligence associated with software procurement.
  + Set up and tested a connection to an external API for data extraction and validation of a third-party software solution.

*System Developer* | Apr 2022 - Jun 2022

* Delivered the company’s first semi-automated data ingestion product for fibre optic testing. This solution was three times faster than the previous manual human input.

### Voluntary Experiences

03/2022 –05/2022 | **Exeter Green Party** | **Database Support** | Exeter

* Generic ad-hoc requests and data transformations. Worked with MySQL workbench.

11/2021 – 03/2022 | **Forage** | **KPMG Data Analytic Virtual Internship**| Virtual, at home

* A virtual experience program that replicated the type of work KPMG graduates do with hypothetical data.
* Data quality assessment: assess data quality and communicate with clients concisely. Data insights: explore data to propose efficient data-analytic models.

09/2017 – 07/2018 | **Henan University of Technology** | Student Interpreter, Volunteered as an interpreter for foreign teaching staff.

### Education

**University of Exeter** 2020 - 2021

*MSc Business Analytics, Merit Obtained*

* A data-centric master programme at one of the UK’s top 10 universities.
* I was interviewed and successfully selected for the QTEM (Quantitative Technique for Economic and Management) program, but voluntarily withdrew to pursue visa status.
* I achieved a distinction for my final project, in which I used topic modelling to identify research funding opportunities.

**Cardiff Metropolitan University** 2018 - 2020

*BA Business Management, Distinction*

* Specialise in people management

**Henan University of Technology** *BA Human Resource Management* 2016 - 2018

* Bachelor’s degree with robust mathematics (calculous, matrix, probability theory) foundation taught in the first year.
* Taught and examined in full English; Achieved distinction for all English modules and awarded two scholarships.

### Professional Qualification

Since 2016 ACCA (5/13)

* Three Foundational module Plus
* Financial management (FM)
* Performance management (PM)

### Portfolios

**Identify Research Funding Trends using Topic Modelling**. This is my Master’s thesis. A project features Topic Modelling (LDA) and natural language processing for scope research funding for artificial intelligence. Full report here: https://github.com/FzliangFrank/Fzliang-UoE-2022

**Network Data Utility tool.** A R-Shiny App Tool Kit for interactive network visualisation. There are several prewritten modules that enables a user to search a particular node or edges based on identity or attribute. A demo of a web app written use this package is hosted on shiny.io: https://frank-the-tank.shinyapps.io/networkutils/

**LLoyd Bank Statement Reader** A Python package which reads a pdf bank statement into .csv, which I used to analyse my personal financial well-being. Repo here: https://github.com/FzliangFrank/pdf\_bank\_statement.

### Interests & Activities

Café Laptop Hoper: Serial laptop hopper frowned by café owners across Cardiff and Exeter. Often found colonising coffee tables coding with my 14-inch MacBook.

Violin performance: few awards performing as a student violinist. Before the pandemic, I was briefly in a non-profit local Orchestra in Cardiff, South Wales

Realistic Drawing: A less noisy hobby. I have a art Instagram: https://www.instagram.com/franklyarts/.

My Playlist: Taylor Swift, Flume, French 79, IMANU…