Shirley He
Data Scientist | Economist

in linkedin.com/in/shhirl ○ github.com/shhirl
☐ +41765086568 @ shirley.he09@gmail.com
◉ Zurich, Switzerland
i Swiss B Permit Holder, British Citizen

💼 PROFESSIONAL SUMMARY

Data scientist who combines strong programming skills with experience in data consulting projects, sales and project management to deliver actionable results that guide business decisions and support research efforts. Through past roles I have experience working in cross functional teams in multiple domains. Specifically interested in working in a cross-functional data team for an growing company and applying technical skills to make a positive difference in the lives of others.

💼 WORK EXPERIENCE

Current Position
October 2020

Data Science Consultant and Teaching Assistant, PROPULSION ACAMDEY AG, Zürich, Switzerland
> **Building a neural network** that extracts information from the company's pdf invoices for an external client, **developing a pipeline to deliver the extracted information to a rest API** in the company's ERP system and **creating a web app** for the user to interact with the text extraction model
> **Supervised 10+ industry data science projects** for companies in Switzerland such as **Thomson Reuters, ETH Library Lab, PIPRA AG, Reishauer AG and Yamo** by guiding the data exploration, research and collaboration to **deliver functional prototypes for the company**
> Ongoing preparation and curation of data science materials through **writing documentation, finding datasets, and designing machine learning exercises** which is vital for Propulsion's ongoing success and their ranking as 2nd best data bootcamp in the world in 2021
> Providing hands-on assistance to students on a range of topics including, **Statistics in R, Python fundamentals, machine learning, deep learning, data science deployment and SQL**, resulting in high levels of student satisfaction and business lead generation

Git | Gitlab | CI/CD | Shell Scripting | JIRA | Docker | Python | Tensorflow | Keras | Gensim | NLTK | R
Beautiful Soup | Selenium

July 2020
March 2020

Data Scientist Internship, DATA SCIENCE CENTER, Barcelona, Spain
> Based on **research papers**, built a model to assess the impact of government random-testing policies on Spain's economy during the COVID-19 pandemic **in collaboration with Accenture Applied Intelligence**, which has been employed and further developed by scientists researching and analysing the effect of COVID-19 for social sciences
> Conducted research in **supply chain analytics** to **recommend data-driven interventions** that guided our client's business during the crisis
> Final Report : Random Testing to Manage a Safe Exit from a COVID-19 Lockdown
  ○ github.com/shhirl/Data_Science_Center_Practicum/blob/main/reports/final_report.pdf

Agile Project Management | Python | GeoPandas | SQL | Latex | Research | Genetic Algorithm | Microsoft Powerpoint

July 2018
November 2017

Qualified Personal Coach, VIRGIN ACTIVE COLLECTION, London, UK
> Developed **science-based training programs** and delivered **tailored 1-2-1 coaching sessions** with an emphasis on treating muscle imbalances, injury prevention and natural movement for building strength, which led to extraordinary mental and physical transformations in clients

Microsoft Excel | Tableau | Salesforce

October 2017
March 2015

Property Manager, RTC PROPERTIES, London, UK
> Invested in family business to **transform outdated properties into modern apartments**
> Developed working relationships between multiple stakeholders to **meet building regulations and deadlines under pressure**
> Utilised business acumen to conduct **market research, develop growth strategies, and close sales** and provide consistent customer service to tenants

Copper (CRM) | Microsoft Excel | Research | Project Management | Customer Service

March 2015 September 2014	**Business Analyst, Agilisys Transformation, London, UK** › Based on multiple client sites providing expertise and support on new **ERP tools and digital software**, leading to the transformation of many local governments' customer service portals into digital and online services › **Led a team that generated new business contracts** for the company through target-based debt re-construction following an ERP system implementation › Responsible for **managing timelines, project expectations**, and **working relationships** between supervisors across client departments which contributed to the renewal of client contracts Microsoft Excel Microsoft Powerpoint Unit 4 Agresso (ERP)

🎓 Education

July 2020
September 2019
	MSc Data Science, Barcelona Graduate School of Economics, Barcelona, Spain
	› GPA : 8.03/10
	› **Master's Thesis : Estimating ICU Bed Levels to Prevent Over-Capacity - An Agent-Based Model**
	Re-implemented the health data pipeline to allow ingestion of **100 million+ rows of healthcare data** into a **cloud database** for further processing
	  ⚙ github.com/c-maine/ICU_capacity_modelling_ABM/blob/master/Submitted_Thesis.pdf
	› ML for Finance Project : Bayesian Framework for Gaussian Process Variable Selection
	  ⚙ github.com/shhirl/Machine-Learning-for-Finance/blob/master/project_report.pdf
	› Data Warehousing Module : built a proof of concept **data warehouse** involving **entity modelling, schema creation**, and data **ETL implementation**
	› Additional Modules included **Data Visualisation, Networks : Concepts and Algorithms, Blockchain Fundamentals, Computational Machine Learning, Reinforcement Learning**
	Python R R Shiny Docker SQL Amazon Web Services GCP Postgres MongoDB (Py)Spark Docker Plotly
	Blockchain and DAPPs Econometrics SpaCy NLTK Gensim PyTorch Tensorflow Keras
	R libraries : caret quantmod fGarch xts lmtest neuralnet kernlab ggplot

March 2019 November 2018	**Data Science Intensive Course, Propulsion Academy, Zurich, Switzerland** › Collaborated with an senior portfolio manager from Allianz Bank in the capstone project to develop **artificial intelligence techniques for Macroeconomic research to support portfolio management**, leading to a business start up Python Numpy Pandas Matplotlib BeautifulSoup (web scraping) Seaborn Dash R Scikit-learn Tensorflow
July 2014 September 2011	**BSc Hons Economics, The University of York, UK** › Grade : 2.1 › Health Economics Project : **Economic perspectives on reducing hospital waiting times and health policy in England** › Microeconomics Theory Project : Understanding **Uncertainty and Risk-Aversion** through Utility Theory

💻 Additional Information

Azure Data Fundamentals, Microsoft Certified   2021
Zürich, Switzerland
Relational and non-relational data in Azure, core data concepts, analytics workloads on Azure
Azure SQL Database Azure Databricks Azure Cosmos DB Azure Synpase Analytics Azure Data Studio

Volunteer Programming Mentor, University College London   2016 – 2017
London, UK
Teaching Python and HTML to children aged 5-17 at Programming Club, Coderdojo
HTML Python Arduino

Personal Training Diploma, Futurefit Training   2017
London, UK
Qualified as a pre- & postnatal specialist and therapist for treating lower back pain to NHS patients