JOSEPH ZAHAR

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EDUCATION

Stanford University   *CA, US*
*Postgraduate Studies, Artificial Intelligence – **GPA: 4.17***   *2023*

Imperial College London   *London, UK*
*MSc Data Science, Business Analytics – **Achieved with First-class Honors***   *2021 – 2022*
Honors: Hacker Challenge Award, Optimization Awards, Outstanding Individual Contribution in Analytics Award

Queen Mary University of London   *London, UK*
*BEng Biomedical Engineering – Ranked 3rd – **Achieved with First-class Honors***   *2018 – 2021*

WORK EXPERIENCE

Za'ta   *London, UK*
Data Lead | Co-Founder   *Mar 2023 – Sept 2023*
- Collaborated in the development of a cashierless payment system leveraging computer vision and machine learning techniques in Python, potentially saving **£65K** in annual costs
- Designed and automated ELT workflows using Airflow and optimized data transformations with dbt for advanced analytics
- Built an ARIMA model in R with **90%** accuracy to forecast daily demand of main ingredients, providing data-driven insights for effective inventory replenishment decisions

Medtronic | Digital Surgery   *London, UK*
Data Science Intern R&D   *Sept 2022 – Feb 2023*
- Developed machine learning models for annotating surgical approaches with **95%** accuracy, reducing data labeling costs by **20%**
- Conducted R&D projects using Python and SQL to mine surgical procedures from instrument annotations, uncovering machine learning prediction challenges in workflow analysis
- Streamlined the automation of data visuals for client presentations by writing system development code in Python, decreasing manual redundancies by **50%** and fulfilling functional specifications

Hostelworld Group | Data Spark Program   *London, UK*
Machine Learning Engineer   *Feb 2023 – Mar 2023*
Data Science Lead   *July 2022 – Sept 2022*
- Led a team of **6** data scientists in tackling a **£3M** digital advertising problem by maximizing the business's return on investment (ROI) in pay-per-click (PPC) ads
- Utilized cross-correlation principles to quantify the impact of marketing spend on customer acquisition across free channels
- Deployed a long short-term memory (**LSTM**) model with **TensorFlow** to forecast weekly ROI in a post-COVID-19 market, achieving a Mean Average Percentage Error (**MAPE**) of **3%**

OrderPay   *London, UK*
Data Science Intern   *Nov 2021 – Aug 2022*
- Generated KPI dashboards using internal data and SQL in Metabase to monitor the on-boarding of new venues and assess customer satisfaction across different channels
- Improved targeted advertising strategies by deploying **2** Naïve Bayes classifiers using Python with **98%** accuracy for efficient product categorization as part of a recommendation engine pipeline
- Introduced an automated process for generating reports and dashboards for clients, freeing up +**1000** hours of manual work

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ACHIEVEMENTS

Kaggle Expert   *London, UK*
- Developed a **TensorFlow Lite** model for on-device sign language recognition in collaboration with **Google**,   *2023 – Present*
  achieving a classification accuracy of 80%

Imperial College Data Science Society   *London, UK*
- Took part in delivering machine learning seminars and data hackathons to the Data Science community   *2021 – 2022*

Rugby Union Player, LRUF & ERFU   *Lebanon & UK*
- Organized large-scale rugby touch events, attracting over 200 participants and securing $2K in sponsorships *2015 – Present*

Boy Scout Leader   *Beirut, Lebanon*
- Chief leader for 2 years and boy scouts movement member for 5 years, directed survival camps and annual events *2013 – 2018*

ADDITIONAL SKILLS

IT Skills: Python, R, SQL, Stata, MATLAB, Bayesian Methods, ML Modeling, Statistical Analysis, Experimental Design, Debugging
Language Skills: French (native), Arabic (native), English (fluent)
Certificates: Data Science Professional Certificate – IBM, AI Medicine Specialization – deeplearning.ai, Machine Learning –Stanford
Community Service: Volunteered in a team of 5 with the Mirror Foundation in Thailand (IVHQ) to establish cultural and recreational activities for children in local schools and delivered primary learning