George Joseph, PhD



MLOps Data Scientist | AI | Product Development

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SUMMARY

8 years total experience working with data. Expert in extracting value from your data, solution prototyping and development, builder and leader of value delivering teams. Multi-modal communicator with strong business acumen.

EXPERIENCE

<u>SEP '20 – present:</u> Senior Data Scientist for Bottomline Technologies offering e-payments, cash management, fraud detection, behavioural analytics, and regulatory compliance solutions.

Working closely with global head of data and data engineering creating data-driven products as capitalised assets. Managing a team but also hands-on with laser focus on product innovation.

Tech skills: Python, SQL, machine learning, pipelining, ETL, operational robustness, auto delivery

ACHIEVEMENTS:

- Leading a team of 5 that delivered 2 products within 1 calendar year
- Strived to improve data quality and availability, product delivery/deployment and robustness
- Data culture influencer and tech "good practice" facilitator

<u>JUL '20 – present:</u> Chief of Data Science Graticule Personalisation creating solutions to close the gap between consumer expectation and business offering.

Direct report to the CEO. Building the company with a focus on the tech-side. Part of the board team for tech/infrastructure decisions made. Participation in meetings with commercial impact.

Tech skills: GCP, Colab, BigQuery, Python, TensorFlow, Asana

ACHIEVEMENTS:

- Secured new business deals with the most recent one being Costa Coffee
- Developing and deploying data exploration frontends
- Data culture influencer and tech "good practice" facilitator

<u>FEB – NOV '20:</u> Chief of Data Science & Platform Architect for Quantar combining state-of-the-art analytics platform built on AWS and Data Science consultation services.

Building the company with C-level executives and technical staff. I engage in the technical, and part of the business and finance strategies. I act as a communication bridge between technical and C-level executives while managing expectations. Responsible for the data science output.

Tech skills: python, deep learning (Keras/TensorFlow), transfer learning, AWS, Azure, GCP

ACHIEVEMENTS:

- Deploying web-apps for cloud tooling integration with our platform using AWS lambda
- Hiring and managing software developers and data specialists, data culture influencer
- Working with data/cloud engineers and promoting lean meetings honing on the mission

<u>DEC '17 – JAN '20</u>: Senior data scientist for Liaison Group specialising in financial consultation and workforce/HR analytics from the subsidiary company Activ8.

Strived to utilise their data instead of increasing team members. Crafted pipelines/tools to streamline and improve invoice analysis and enhance staff training material from insights. Involved in data strategy and culture, built, and led projects and teams conceived with C- executives.

Tech skills: python, pandas, NLP (spaCy), git, SQL, stats, sklearn/GBM, Keras, flask, Azure, GCP

ACHIEVEMENTS:

- Created data pipelines to perform automated invoice analysis deployed as web apps
- Enhanced VAT advisor training material informed by model explainability (SHAP/LIME)

<u>OCT '13 – DEC '17</u>: Data scientist and lead of the project *"data science informing chemical engineering for stem cell control in synthetic environments"* at Keele University (EPSRC).

Simulated cell culture experiments computationally using machine learning to discover better surface chemistries for tissue engineering to develop therapies for neurological diseases. Involved in research projects for cell image analysis and EEG data clustering from live firing neurons.

Tech skills: python, pandas, SQL, stats/SciPy, sklearn, MLP, GCP, k-means

ACHIEVEMENTS:

- Accelerated non-computational operations 1000x by solving them computationally with AI
- Developed a platform that automatically profiles new test cases (mathematical optimisation)
- Reduced material costs by 75% and increased overall operation efficiency by 50%

CORE COMPETENCIES

- End-to-end product development, AI business analysis
- AI, cognitive computing, machine learning, computer vision, automation
- Data mining (insights), prediction, prescription, and exploratory data analysis
- Data-driven product development in multiple fields including finance and biomaterials
- Data communication: write, format, and present technical prose; facilitate data-informed discussions; and help non-technical professionals act on data findings

SIDE PROJECTS

SEP '18 - present: Seminar and workshop organiser/speaker (volunteer) (DSN)

<u>MAR – APR '17:</u> Computer vision project: discovered methods to extract data from images regardless of orientation. These methods are robust against noise and injection attacks.

ACHIEVEMENTS: Computer vision competition top 15% score in cervical cancer screening

EDUCATION

- OCT '13 NOV '17: PhD in Regenerative Medicine at Keele University (EPSRC scholarship
- <u>SEP '08 MAY '12</u>: BSc in Computer Networks & Cybersecurity BSc (Hons), First Class)

CERTIFICATIONS/COURSES

- Biostatistics (Keele '14) The Enterprising Researcher (Lboro '12)
- Health Economics and the Headroom Methods, IP, Economic Evaluation of Projects ('12)

LANGUAGES: English, Greek

INTERESTS: Social and physically active. Raising for charities; walked 50 miles for <u>SMA</u>