Louise Kirkham

(MPhys MSc) Data Scientist | Physicist | Researcher

louisek@gmail.com
+44 (0) 7425 174851
London, UK
louise-kirkham/
LNKirkham

Summary

A passionate data scientist with extensive experimental research experience and demonstrated ability to lead collaborative projects with partners from industry, academia and government, both UK and internationally.

Keen interest in applying machine learning techniques to optimisation and recommendation problems and scaling data science projects through lean, agile ways of working to deliver real, data-driven business solutions.

Always looking for new opportunities with forward-thinking businesses for continued professional development and to provide exciting insights and true impact.

Skills

Programming languages: Python, R, Matlab, Haskell, Scala
ML Frameworks: Scikit-learn, NLTK, Tensorflow
Data Visualisation: Plotly, Matplotlib, Seaborn, ggplot2, Dash, Shiny
Model Deployment: Docker
Cloud Computing: Google Cloud Platform
Ways of Working: Agile Framework, Git version control, Lean Startup Approach, Scaling Data Science Projects, Test Driven Development
Processing and Compute Resources: SQL, Spark

Core Values

Honesty and Integrity
Continued Professional Development
Accomplishment and Achievement
Collaboration
Variety and Diversity
Work/Life Balance

Education

University of York — 2004 - 2008

MPhys (Hons) Physics with Astrophysics 2009

Awarded: 2:1
Dissertation: Upgrading the Department's Radio Telescope for the Detection of the 6.7 GHz Methanol Maser Line

University of Manchester — 2011 - 2012

Radio Wave Imaging and Sensing MSc (Hons) 2011
Awarded: Distinction
Dissertation: Characterisation and Calibration of a Large Aperture (1.6 m) ka-band Indoor Passive Millimetre Wave Security Screening Imager [Proc. SPIE 8544, Millimetre Wave and Terahertz Sensors and Technology V, 854408 (26 October 2012)]

Employment

Royal Mail

Data Scientist — Dec. 2019 - Present

Supporting projects within the data science team within Group Business Intelligence, particularly focused on revenue prediction, recommender systems, NLP and sentiment analysis, demand forecasting and vehicle routing optimisation.
Helping to deliver new insights and process-enhancing tools for the business to allow us to achieve our strategy of becoming parcels business.
Line management of junior colleagues and mentoring to support team members with agile ways of working and cloud deployment of data science projects.

Junior Data Scientist — July 2018 - Dec. 2019

Supporting projects within the data science team within Group Business Intelligence, focused on customer experience insight through natural language processing of enquiries, customer segmentation revenue prediction and churn modelling.

Defence Science and Technology Laboratory (DSTL)

Senior Research Scientist — Apr. 2018 - July 2018

Providing scientific expertise to support research and development projects within the Sensing and Detection group of the Counter Terrorism and Security division. Experimental design and evaluation of detection and diagnostic technology for military and security applications. Leading an experimental trial team to deliver cutting edge research including laser-plasma acceleration at a world-class high-power laser facility.

Research Scientist — Nov. 2014 - Apr. 2018

Support to research and development work within the Novel RF Techniques Team of the Sensing and Detection Group, Counter Terrorism and Security Division. Collaborating with industrial, academic and other government departments both UK and internationally to deliver critical, cutting-edge advice and insight to military and government stakeholders.

Graduate Research Scientist — Nov. 2012 - Nov. 2014

Provided support to research and development work within the Physical Detection Team, Sensing and Detection Group, Security Sciences Department. Contributed to experimental design and evaluation testing of operational military diagnostic equipment.

Activities

Swing and jazz dance (Lindy Hop and Chrous Line) , quad-skating, motorcycling

Volunteering - Outreach with STEM Ambassador Program, Support to Hackney and Homerton Mutual Aid Groups

Stage-managing and Front-of-House support to dance and cabaret events.