

## Skills

Programming SQL/T-SQL, Python, Git  
Other Pandas, Numpy, Scikit-Learn  
General Statistics, Machine Learning, Strong ad hoc problem solving

## Experience

Dec 2020 – **Unilever - Senior Data Science and Analytics Manager**, UK.

Present Responsibilities:

- Leading the HR analytics team as a lead data scientist
- Mentoring data scientists across the organisation
- Leveraging key technical resources across the company along with the tools available to deliver vital solutions to time sensitive problems (such as the covid response)
- Enhancing the visibility and value our work brings to senior leadership by identifying strategic opportunities

Mar 2019 – **Unilever - Data Science and Analytics Manager**, UK.

Dec 2020 Responsibilities:

- Identifying areas of key interests to stakeholders across the organisation, translating to a structured goals and outcomes oriented sprint and leading the data science team to deliver insights.
- Developing end-to-end Machine Learning solutions.
- Ensuring members of the team have the support, guidance and direction they need to accomplish their goals.
- Supporting the recruitment process from a statistical perspective, ensuring it is bias-free, efficient and cost effective.
- Training and up-skilling the team in areas such as Data Science, Python, SQL and Git.

Jun 2018 – **Thought Provoking Consulting - Quantitative Consultant, Data Scientist**, UK.

Aug 2018 Responsibilities:

- Inference methods (Bayesian) - R.
- EDA and machine learning (Linear Regression, NLP) - Python.
- Implementing optimisation algorithms (algorithms developed to optimise a target indicator) - C#.
- Creating and maintaining proper source control, deployment and maintenance of code for in-house tools.

Dec 2017 – **FIS (SunGard) - Quantitative Consultant**, UK.

May 2018 Responsibilities:

- Specification and implementation of mathematical models using C# for the efficient pricing of complex financial products, for the evolution of future market and credit events and for the calibration of risk models.
- Verifying that new and existing models are correct and appropriate.
- Providing client support on questions related to software behaviour.
- Project management in times of scarce resources.

Sep 2015 – **FIS (SunGard) - Consultant, Risk and Compliance, UK.**

Dec 2017 Previously SunGard Financial Systems. A vendor providing solutions to financial corporations in terms of risk and exposure management and financial regulatory compliance. Responsibilities:

- Maintenance, optimisation and troubleshooting of test farms / servers / databases which clients use for test cases for product development using Delphi and T-SQL (Microsoft SQL Server).
- Finding and carrying out optimisations and fixes to these environments
- Implementing code changes (Pascal/C#) to improve or fix issues in calculation methodology/equations
- Customisation of the user facing web code to suit the needs and requirements of users (Javascript/C#)
- Coding and producing independent support utilities to improve client satisfaction

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## Academia

2011 – 2015 **Imperial College London, PhD. Materials Science and Engineering, UK.**

- The focus during my PhD research has been on the development of theory and code (C++) for the phase-field modelling and simulation of microstructures found in steel [1,2] as well as the formation of van der Waals fluids using the smoothed particle hydrodynamics method.
- Given my interest in the prediction of general evolutionary phenomena, I have collaborated on cellular automata treatment for solidification [3].
- My final results involve the development of tools to combine the capabilities of multiple models to deal with situations involving fluid flow, solidification and solid-state phase transformations.

2009 - 2010 **Queen Mary University of London, MSci. (1<sup>st</sup> Class Hons) Mathematics, UK.**

2006 - 2009 **Queen Mary University of London, BSc. (1<sup>st</sup> Class Hons) Mathematics, UK.**

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## Training

February 2020 **Structuring Machine Learning Projects**[Coursera-Certificate]

January 2020 **Improving Deep Neural Networks**[Coursera-Certificate]

January 2020 **Neural Networks and Deep Learning**[Coursera-Certificate]

December 2019 **Machine Learning**[Coursera-Certificate]

December 2018 **Bayesian Statistics**[Coursera-Certificate]

August 2017 **Inferential Statistics**[Coursera-Certificate]

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## Awards

June 2012 National Student Conference in Metallic Materials - Awarded best presentation prize for the presentation of PhD project. [DepartmentLetters.pdf]

July 2009 Queen Mary University of London - Awarded the Westfield Trust Prize for outstanding academic achievement, [Awards.pdf]

May 2006 QCA Lewisham College - Gym, Exercise and Fitness Knowledge instructor.

July 2005 Lewisham College - Awarded enrichment certificate in peer mentoring.

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## Speaking

June 2014 Imperial summer seminar series - Talk “A fundamental problem in computational steels processing”.

December 2013 International Conference on Processing & Manufacturing of Advanced Materials - Poster “A phase-field model for the formation of martensite and bainite” [ThermecProgramme.pdf]

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## Publications ([ACADEMIA.EDU](http://ACADEMIA.EDU))

- [1] T. T. Arif and R. S. Qin: *A phase-field model for bainitic transformation*, Computational Materials Science **77** (2013) 230, [doi:10.1016/j.commatsci.2013.04.044].
- [2] T. T. Arif and R. S. Qin, *A phase-field Model for the Formation of Martensite and Bainite*, Advanced Materials Research **922** (2014) 31, [doi:10.4028/www.scientific.net/AMR.922.31].
- [3] Y. Zhao, D. Chen, M. Long, T. Arif and R. Qin, *A three dimensional cellular automata model for dendrite growth with various crystallographic orientations during solidification*, Metallurgical and Materials Transactions B **45** (2014) 719, [doi:10.4028/www.scientific.net/AMR.922.31].