

Georgios Giasemidis

Mobile: +44(0)7909414309, Email: g.giasemidis@gmail.com, London, UK.

Linkedin: uk.linkedin.com/in/ggiasemidis, Github: <https://github.com/giasemidis>,

Blog: <https://giasemidis.github.io/>, Google Scholar: <https://bit.ly/3oBrDj0>

Work Experience

- Apr. 2022 – present **Lead Data Scientist**, *Choreograph, WPP (former Sandtable)*, London.
Data science and model building of complex systems focusing on *Agent Based Modelling (ABM)* simulations, ML, *geo-spatial data science*, and *generative AI* in Python with applications in marketing and advertising.
- Line and team management
 - Stakeholder management
 - Data strategy and solutions design
 - Consultancy on data science projects and solutions across the organisation
 - Team development and strategy
 - Mentor of data scientists and data technologists across the organisation
 - ABM for automotive and retail clients
 - [Generative AI applications \(data chat-bots\)](#)
 - [Geo-spatial data science](#) with applications in retail
- Apr. 2019 – **Senior Data Scientist**, *Choreograph, WPP (former Sandtable)*, London.
Apr. 2022 Data science and end-to-end development, implementation and execution of ABMs.
- ABMs for a number of sectors; automotive, retail, health (Covid-19 vaccine rollout), media.
 - Project management.
- Dec. 2013 – **Senior Data Scientist**, *CountingLab LTD*, Reading.
Apr. 2019 Data analytics in (i) energy, (ii) retail & (iii) defence sectors. Data analysis, research and mathematical modelling. Implementation of machine learning algorithms in Python, analysis of output and presentation of results. Main Projects:
- Short & medium term energy demand forecasting. Modelling future demand low-voltage networks for the TVV project, in collaboration with *SSEN*, funded by *Ofgem*.
 - Customer segmentation and emergent behaviour patterns for retail client.
 - Sentiment & social network dynamics, funded by *MoD*.
 - Development of algorithms for identifying the veracity of rumours (fake news) (Phase 1 & 2), funded by *MoD*. Expertise in Twitter-data collection. Research lead and project co-management.
 - Automatic threat detection of firearms in X-rays, funded by *SBRI* via *InnovateUK*. Research lead and project management.
 - Energy demand forecasting for smart storage control.
 - Dissagregation of energy demand for SMEs, in collaboration with *ANDtr*, funded by *InnovateUK*.
 - Achievement: Joint 3rd place in Global Energy Forecasting Competition 2014.

Education

- Oct. 2009 – Sep. 2013 **D.Phil. (Ph.D.) Theoretical Physics**, *University of Oxford*, Kellogg College, Thesis title: *Spectral dimension in graph models of causal quantum gravity*.
- Spring Term 2009 **Visiting Researcher**, *University of Bonn*, Theoretical Physics, via Socrates - Erasmus programme.
- Oct. 2004 – Jul. 2009 **B.Sc. Physics**, *University of Athens*, Graduated with "Excellence", 9.06/10, second best grade in the year out of 200 students. First-class honours degree.

Tech Stack

- Data Science Stack Python (excellent); pandas, numpy, scipy, sklearn. Ten years of experience.
SQL (excellent), GCP (very good), Snowflake (very good), AWS (good), Docker (good), C/C++ (good), Matlab (good), Mathematica (good).

- Methods & techniques
- Agent Based Modelling (ABM) simulations.
 - [Geo-spatial data science](#).
 - Generative AI applications.
 - Machine learning: supervised, semi-supervised & unsupervised algorithms, feature reduction techniques, biased datasets.
 - Optimisation algorithms: genetic algorithms, integer programming, etc., see [Publication](#) for further details.
 - Time-series & forecasting methods: time-series analysis, recurrence quantification analysis, kernel density estimation, quantile regression, machine learning regression methods, see [Publication 1](#) and [Publication 2](#) among others for further details.
 - Natural language processing and message stance classification, see [Publication](#) for further details.
 - Image processing: thresholding, key-point detection, object detection, see [Publication](#) for further details.
 - APIs, e.g. [Twitter](#), [Facebook](#), [ESPN NBA](#), [Euroleague-API](#).
- Research & mathematics
- Strong mathematical background, analytical and numerical skills.
13 publications in peer-reviewed journals, 6 in peer-reviewed international conference proceedings, 2 book chapters, with hundreds of citations. Details on [Google scholar profile](#).
- Mentor
- Participated in KaggleX's mentorship programme as mentor. Mentoring young data scientists at work.
- Side Projects
- NBA fantasy analytics, see blog on [Medium.com](#). Predicting the outcome of Euroleague basketball games, article on [arXiv.org](#). Euroleague [shot charts and analytics](#). Generative AI apps.

Interests

Sciences, raspberry pi applications, Lego enthusiast, scuba diving, travelling and sports.
Sports analytics, particularly basketball.