

SREEKUMAR THAITHARA BALAN

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PROFESSIONAL EXPERIENCE

PROPORTUNITY

Head of Data Science

Research Team Lead

London, UK

2022-2024

2018-2022

Joined the company at the seed stage as the 5th employee and grew the data science team to 5 scientists and engineers. Led the design and development of a Machine Learning (ML) model ensemble; achieved industry-leading accuracy of 93%.

Worked closely with the product team to deploy the company's data-driven real estate market intelligence platform incorporating six datasets, resulting in approximately 20% improvement in the website visitors using the platform.

- Designed a unified data lake incorporating 14 geospatial and temporal data sources which resulted in new models to be prototyped within a week's time.
- Reduced the cost of data pipelines by 40% by identifying bottlenecks and choosing optimal parallelisation; resulted in £12k savings per year.
- Created a 50-page report detailing the model performance; shared with potential investors and culminated in £3 million Series A funding for the company.
- Composed over a dozen data-backed stories for the company's public relations (PR) outreach campaign, published in prominent news dailies in the UK e.g. Time out London and The Standard.
- Created quarterly Objectives and Key Results (OKRs), articulating them clearly through structured feedback loops which enabled the tech team to achieve high velocity (1-2 significant upgrades to ML models per month).

ALPHA-I

Chief Technology Officer

London, UK

2016-2018

Co-founded an AI powered hedge fund and spearheaded the development of a Bayesian Deep Learning model for trading S&P-500 stocks; raised close to \$1 million in seed funding through Entrepreneur First and other global VCs.

- Led a team of 3 scientists and 2 engineers to design and develop a cutting-edge ML methodology for predicting the expected values of 100s of equities which achieved ~60% accuracy in predicting their variance.
- Built a backtesting methodology for thoroughly testing the time series models; enabled rapid hyper-parameter optimisation of deep learning models and safe deployment of new strategies within a fortnight.
- Created a comprehensive write up with illustrations on the company's Bayesian Deep Learning technology, published as a blog which reached top-10 articles in Hacker News.

UNIVERSITY COLLEGE LONDON

Postdoctoral Research Associate

Research Assistant

London, UK

2012-2016

2007-2008

Researched and developed cutting-edge Bayesian statistical methods with High Performance Computing (HPC) for analysing cosmological data from space telescopes; 20 peer reviewed publications.

- Spearheaded the software development by collaborating with researchers from top UK universities for the Power Spectrum Work Package of the European Space Agency's Euclid Space Telescope; presented results at the prestigious 2016 National Astronomers Meeting, UK.
- Supported and mentored three master's students on their 12-month research project.

EDUCATION

UNIVERSITY OF CAMBRIDGE

Doctor of Philosophy in Astrophysics

Developed efficient statistical methods for astrophysical data analysis, resulting in the co-discovery of 3 extra solar planets.

- Awards: Prestigious Isaac Newton Scholarship (awarded to 2 out of 1000 applicants)

UNIVERSITY COLLEGE LONDON

Master of Science in Physics

- Awards: Awarded Master of Science with Distinction.

ADDITIONAL INFORMATION

- Top skills: Machine Learning & AI Development, Data Science Leadership, Technical Problem Solving
- Project management & communication tools: Notion, Trello, Slack, Google Workspace
- Technical stack: Pandas, PyTorch, LightGBM, XGBoost, NumPy, scikit-learn, MLFlow, FastAPI, AirFlow, Python, SQL, C/C++, Fortran, Rust
- Awards: Achieved top 2% (108th out of 5558 participants) in Kaggle M5 Time Series Forecasting Competition