Oliver Hamelijnck

Doctoral Researcher | ohamelijnck.github.io ollie.hamelijnck@warwick.ac.uk | ohamelijnck@turing.ac.uk

2019 2013 2017 2008 2013

LINKS

Github:// ohamelijnck G-Scholar:// CZTISTEAAAAJ Website:// ohamelijnck.github.io

PROGRAMMING

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| Python | |
|------------|--|
| Jax | |
| PostgreSQL | |
| Tensorflow | |
| Java | |
| C/C++ | |

OBJECTIVE

My research explores Machine Learning methods, such as Gaussian processes, to advance spatio-temporal models for real-world phenomenon

EDUCATION

PHD, COMPUTER SCIENCE UNIVERSITY OF WARWICK Alan Turing Institute Doctoral Student 2019 Efficient Spatio-Temporal Inference for Gaussian Processes

MENG, COMPUTER SCIENCE UNIVERSITY OF WARWICK

Graduated with First Class Honours degree

A LEVELS + GCSES

A levels: A*AA in Maths, Chemistry, Physics GCSEs: 4 A*s, 5As, 1B including Maths and English

PUBLICATIONS

SPATIO-TEMPORAL VARIATIONAL GAUSSIAN PROCESSES

TO APPEAR AT THE THIRTY-FIFTH CONFERENCE ON NEURAL INFORMATION PROCESSING SYSTEMS, NEURIPS 2021

O. Hamelijnck^{*}; W.J. Wilkinson^{*}; N.A. Loppi; A. Solin; T. Damoulas;. ^{*} = Joint first authors #2 Publication venue in Artificial Intelligence (*H index*, *Google Scholar*)

TRANSFORMING GAUSSIAN PROCESSES WITH NORMALISING FLOWS

PROCEEDINGS OF THE 24TH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND STATISTICS, AISTATS 2021 J. Maronãs*; O. Hamelijnck*; T. Damoulas; M. Steel. * = Joint first authors

#16 Publication venue in Artificial Intelligence (H index, Google Scholar)

NON-STATIONARY NON-SEPARABLE GAUSSIAN PROCESSES

INTERNATIONAL CONFERENCE ON MACHINE LEARNING, ICML 2020 K. Wang; O. Hamelijnck; T. Damoulas; M. Steel #3 Publication venue in Artificial Intelligence (*H index, Google Scholar*)

MULTI-RESOLUTION MULTI-TASK GAUSSIAN PROCESSES THIRTY-THIRD CONFERENCE ON NEURAL INFORMATION PROCESSING SYSTEMS, NEURIPS 2019

O. Hamelijnck; K. Wang; T. Damoulas; M. Girolami #2 Publication venue in Artificial Intelligence (*H index, Google Scholar*)

2021

WORK EXPERIENCE

AMAZON | RESEARCH SCIENTIST INTERN March - August 2021 | Virtual

- Developed and implemented optimisation models to handle uncertainty from demand forecasts
- Close collaboration with the business team to bring optimisation models into production



ALAN TURING INSTITUTE | RESEARCH ASSISTANT

2017-2019 | London, UK

- Brought in to research and develop machine learning models to forecast air pollution across London
- Developed multiple state-of-the-art Gaussian Process models resulting in publications in top-tier conferences

MODALITY SYSTEMS | SOFTWARE ENGINEER, INTERN

Summers 2014-2016 | Norwich, UK

- Explored and assessed the commercial benefit of a beta-released library (using Angular JS)
- Extended an automated test suite to support new products

FELLOWSHIPS AND AWARDS

ALAN TURING INSTITUTE DOCTORAL FELLOWSHIP | 2019 - PRESENT Award covers tuition fees, travel funds and stipend

NEURIPS TRAVEL AWARD | 2019

DEPARTMENTAL COURSEWORK PRIZE | 2013

Coursework ranked in the top 5 out of 150

INVITED PRESENTATIONS

THE UNIVERSITY OF TÜBINGEN - METHODS OF MACHINE LEARNING GROUP SPATIO-TEMPORAL VARIATIONAL GAUSSIAN PROCESSES | JULY 2023 Tübingen, Germany

WARWICK MACHINE LEARNING GROUP SPATIO-TEMPORAL VARIATIONAL GAUSSIAN PROCESSES | NOVEMBER 2021 Virtual

AMAZON - ATS RESEARCH TRANSFORMING GAUSSIAN PROCESSES WITH NORMALISING FLOWS | MARCH 2021 Virtual

MLNET - UNIVERSITY OF SHEFFIELD MULTI-RESOLUTION MULTI-TASK GAUSSIAN PROCESSES - LONDON AIR QUALITY | JULY 2020 Virtual

LONDON BOROUGH DATA PARTNERSHIP MODELLING LONDONS AIR QUALITY | MARCH 2018 City Hall, London, UK

SELECTED PRESENTATIONS

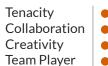
ICML NONSTATIONARY NONSEPARABLE RANDOM FIELDS Poster Presentation | Virtual

NEURIPS MULTI-RESOLUTION MULTI-TASK GAUSSIAN PROCESSES Poster Presentation | Vancouver, CAN

DATA-CENTRIC ENGINEERING READING GROUP SPARSE GAUSSIAN PROCESSES | JULY 2019

The Alan Turing Institute, London, UK

SKILLS



2014

2015

HOBBIES

Climbing/Bouldering Bread Making Playing Guitar