Jake Cunningham

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Interests

My research interests are in developing Bayesian machine learning methods with particular focus on applications in climate science

Education

Ph.D. Machine Learning 2021-Present
University College London, Department of Computer Science
Supervisor: Marc Deisenroth

M.Sc. Computing (AI and Machine Learning) 2020-2021
Imperial College London, Department of Computing
Research Project: Stochastic Partial Differential Equations and Gaussian Processes
Supervisor: Mark van der Wilk
Grade: Distinction 82.77%

M.Eng. Engineering Science 2016-2020
University of Oxford, Keble College, Department of Engineering
Research Project: Modelling Global Distribution of Floating Microplastics
Supervisor: Ton van den Bremer
Grade: First Class Honours 75.63%

Publications

H.J.Cunningham, C.Higgins, T.S. van den Bremer. *The Role of the Unsteady Surface Wave-Driven Ekman–Stokes Flow in the Accumulation of Floating Marine Litter.* Journal of Geophysical Research: Oceans, 2022

Awards

Imperial Computing Distinguished project 2021
Awarded for outstanding individual projects in terms of technical achievement

Challenger Society for Marine Science Student Award 2020
Awarded for demonstrating excellence in Marine Science Research

Keble College Franklin Award 2020
Awarded for best overall performance in 4th year Engineering Science

Keble College Academic Scholarship 2018-2020

Employment History

Mercury Labs 2021-Present
Data Scientist
Designed zero-shot recommender systems for low-traffic small businesses

Waves and Flows Research Group, University of Oxford 2020
Research Assistant
Developed global ocean models and performed large particle tracking simulations

AMR International 2019
Strategy Consultant
Built quantitative models to assess investment risk

Technical Skills

Languages
Python, Matlab, Julia

Machine Learning Frameworks
PyTorch, TensorFlow, JAX, GPflow