

# RAMÓN DINETH NARTALLO KALUARACHCHI

## PROFILE

Ramón is an applied mathematician and computational neuroscientist studying for a DPhil in Mathematics at the University of Oxford with research interests in mathematical modelling with a particular focus on whole brain modelling, brain states and their control, Bayesian approaches to neuroscience and machine learning.

## EDUCATION

### UNIVERSITY OF OXFORD - DPHIL MATHEMATICS - 2022-2026

Research in applied mathematics and computational neuroscience. Supervised by Alain Goriely & Renaud Lambiotte in the Oxford Mathematical Brain Modelling group (OCIAM) and Morten Kringelbach in the Centre for Eudaimonia and Human Flourishing.  
Member of St Catherine's College.

### UNIVERSITY OF WARWICK - MASTER OF MATHEMATICS WITH STUDY IN EUROPE (MMATH) - 2018-2022

**85% - First Class:** Master's courses in Applied Dynamical Systems, Structures of Complex Systems, Epidemiology by Example

### UNIVERSIDAD COMPLUTENSE DE MADRID- STUDY ABROAD (MATHEMATICS) - 2020-2021

**8.5 Notable:** 4 x 'Matrícula de Honor' (Highest honour/top mark) in Numerical Analysis of PDEs, Numerical Analysis, Stochastic Processes & Algebraic Equations

### WILSON'S SCHOOL - 4 A LEVELS, 5 AS LEVELS, 12 GCSES

A Levels: Further Mathematics - A\*, Mathematics - A\*, Physics - A\*, Economics - A\*, Computer Science AS - A, GCSEs: 12A\*s

## EXPERIENCE

### TEACHING ASSISTANT, UNIVERSITY OF OXFORD, OXFORD (OCT 2022-NOW)

Teaching assistant for two groups on the MSc course in Numerical Analysis of PDEs. I mark assignments and support the class tutor.

### GRADUATE TEACHING ASSISTANT, UNIVERSITY OF WARWICK, COVENTRY (OCT 2021- JUNE 2022)

Supervisor to ten first year undergraduate maths students. I ran support classes and marked assignments in core modules including: algebra, analysis and ODEs. Nominated for Warwick Award for Teaching Excellence (WATE).

### SOFTWARE DEVELOPER, SOFWIRE, LONDON (JUL-AUG 2021)

Summer internship as a full stack developer. Used Typescript and React to develop a content management system for an insurance company. Worked with APIs, UX design, containerisation and version control.

### GLOBAL DATA ANALYST, BLOOMBERG, LONDON - REMOTE (JUL-AUG 2020)

Summer internship as a global data analyst in the Corporate Actions team processing entity metadata. I completed a primary project that focused on automating the processing of data for MTFs using Python scripts and a secondary project focused on finding newsworthy trends in the IPO database.  
Awarded the "007 Award" - for the intern who 'remained quiet but completed the best work behind the scenes'.

### ACCOUNTING ASSISTANT, SARGENT & CO., CATERHAM (JUL 2016, JUL-AUG 2018)

Work experience then full time role during the summer providing accounting/bookkeeping services for small firms and sole traders.

## PROGRAMMING

**LANGUAGES:** PYTHON R MATLAB TYPE/JAVASCRIPT RUBY (BASIC) VBA (BASIC)

**TOOLS/LIBRARIES:** GIT PANDAS/NUMPY/SCIPY/SCIKIT REACT BLOOMBERG

DataCamp: "Machine Learning With Tree Base Models in Python" Google: "Machine Learning Crash Course"

## RESEARCH PROJECTS / PROJECTS

"Structure preserving splitting integrators for spiking neuronal models" - **MASTER'S THESIS** ; UNIVERSITY OF WARWICK (2021-22) (SUPERVISION: MASSIMILIANO TAMBORRINO)

"Hierarchical randomly grown neural networks " - **PROJECT** ; UNIVERSITY OF WARWICK (2021-22) (SUPERVISION: MARKUS KIRKILIONIS)

"Finite volume methods for the advection equation in 1D" - **RESEARCH PROJECT**; UNIVERSIDAD COMPLUTENSE DE MADRID (2021)(SUPERVISION: FÉLIX DEL TESO MENDEZ)

## LANGUAGES

ENGLISH (NATIVE) SPANISH (NATIVE - C1)

## AWARDS & ACHIEVEMENTS

**SCHOOL:** House Captain/ Senior Prefect (2018), Combined Cadet Force: Sergeant (2018), Basketball Colours (2017), Music Colours (2017), Public Examination Prize (2016), James Zeglovskis Memorial Prize (2011)

**MATHEMATICS:** EPSRC Full DPhil Scholarship (2022); SMC 2018 (Gold Award), IMC 2014,15,16 (Gold Award), UKMT Kangaroo Qualifier 2016,18

**INTEREST:** Basketball: Oxford Men's Team (2022), Warwick Men's Team (2019-2022), Surrey County Squad (2015,17). Music: Acoustic Guitar Grade 8 (Distinction) Classical Singing Grade 8 (Merit)