# DANIEL HUMPHRIES

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# **TOOLS & TECHNOLOGIES**

Software & Tools Language: Python // JavaScript // Rust // Haskell // SQL // C/C++

Front-end: Svelte // React // Vue // Three JS // WebGL // WebGPU Back-end: Supabase // Flask // Docker // PostgreSQL // MongoDB Full-stack: GCP // AWS // Linux // GraphQL // Blender // PyTorch

### **EDUCATION**

#### King's College London / University College London

September 2024 -

PhD Candidate - London Interdisciplinary Doctoral Programme

London, UK

- $\cdot \ \, \text{Applied Mathematics at King's College London. Computational Neuroscience at University College London.}$
- · Discrete Graphs, Hopfield Networks, Computational Modelling (Schizophrenia), Applied Pure Mathematics.

## King's College London

September 2021 - September 2022

MA Philosophy

London, UK

- · Course of study focused on Kant's First Critique, Representation, and Epistemology.
- · Masters Dissertation: 'Carving the Mind at its Joints' with Prof Bill Brewer

## University College London

September 2014 - May 2018

MSci Neuroscience

London, UK

- · Course of study focused on Computational Neuroscience and Dynamical Systems.
- · Masters Dissertation: 'Dendritic Spine Stability during Regulative Homeostasis' with Prof Tara Keck
- · Bachelors Dissertation: 'Neural Oscillatory Rhythms: Physics & Function' with Dr Lorenzo Fabrizi

#### RESEARCH

#### Universität Leipzig / MPI MiS

Dec 2023 - March 2024

Research Intern // Web Engineering

Leipzig, Germany

- · Built an interactive website for a community science research project for Dr. Érika Roldán Roa.
- · Web Assembly integration of python in svelte web app. website: https://fence-challenge.vercel.app.

## University College London

June 2023 -

Research Assistant // Systems Engineering

London, UK

- · Working with Dr. Daniel Bush in the Human Electrophysiology lab.
- $\cdot$  Building a real-time, closed-loop stimulation system for manipulating SWRs in human subjects.

#### University College London

October 2022 - May 2023

Research Assistant // Analysis Pipelines

London, UK

- · Worked with Dr. Alexandra Constantinescu in Professor Neil Burgess's group at the UCL ICN.
- · Building 7T fMRI analysis pipelines.

## OTHER

#### Bartlett School of Architecture

July 2021 - September 2022

Computational Soul: Guest Seminar

London, UK

- · Invited to run guest seminar on 'computational soul' as part of the Xalon Digital-Communities lecture series.
- · Discussed the notions of soul and representation in objects, and what it takes to synthesise 'computational soul'.

## Metamodernism as a Service

December 2020 - September 2021

AI-Generated Poetry Series

London, UK

- · Computer generated 'poetry' made with the early GPT-3 demo API. Exploring notions of self in artifical agents.
- · 3AM Bauhaus-FM radio perfomance with Vivien Jester in Weimar, Germany. Gallery show in Portland, USA.