

Andoni Sergiou

83 Park Avenue, Potters Bar, Hertfordshire EN6 5EW

Phone: 07503349538 E-Mail: sergioua@outlook.com Research Gate: https://www.researchgate.net/profile/Andoni_Sergiou

Profile

A PhD student of cultural evolution at the university of Exeter, my research specialty is collective brain theory. I use agent-based models and artificial neural networks to study how human social networks process cultural information over multiple generations in order to produce cultural adaptations, technological innovations, and socioecological development. I have contributed theoretical work towards the publication of an artificial intelligence and evolutionary neuroscience book *The Fractal Brain Theory* (Tsang, 2016), and am also the co-founder and owner of my own company.

Education

University of Exeter

2020-present

- Ph.D. Biological Science (Cultural Evolution)
- Thesis topic – Coevolution of Social Network Architectures and Cumulative Culture

University of Oxford

2018-2019

- M.Sc. Cognitive & Evolutionary Anthropology
- Dissertation Topic - *Evolution in Mind: Is the Cultural Evolution of Cognitive Mechanisms Analogous to that of Cultural Skills?*
- Both dissertation and degree awarded distinction.

University of Kent, Canterbury

2015 - 2018

- B.Sc. Biological Anthropology (hons) – awarded distinction.
- Relevant modules – Culture & Cognition, Primate Behavioural Ecology, and Neuroscience.
- Dissertation topic – Pragmatics in Black Capuchin Functionally Referential Alarm Calls.

Research Experience

Computational and Agent-Based Modelling

- Experience using R for both inferential statistical analysis and agent-based modelling (ABM).
- Regarding ABMs in particular, I have successfully reproduced the findings of Henrich's (2004) model of population size-sensitive cumulative cultural evolution in agent-based ABM format using R.

- A tutorial and the required R code for the above mentioned ABM is provided in R Markdown [here](#).
- Knowledge and experience using other ABM and cellular automata platforms with more advanced graphical features; specifically, Netlogo (Wilensky, 1999).

Primate Cognitive Ethology

- Whilst I have not yet conducted animal field or laboratory work, I have undertaken coding of primate behavioural footage (black capuchins and chimpanzees), and have conducted statistical analysis upon the capuchin data.
- I am experienced in social network analysis using R, and it's application towards primate grooming networks.

Additional Skills & Work Experience

Co-Managing Director & Software Engineer at Greek TV

2019 – present

- As the co-founder and co-managing director of the Greek version of Netflix, I am continually training myself in the use of WordPress, Java, CSS, HTML, XML, and Android Studio.
- Capable of writing documents in Latex.
- Success in coding and producing applications for mobile phones and television boxes.

Fractal Anthropology Research Programme (self-funded)

2016 – 2018

- Testing of own cognitive hypotheses using a mixture of ethnographic fieldwork and portable, wireless, lightweight electroencephalography (EPOC+ by *Emotiv inc.*).
- Software use & experience: SPSS statistical package (*IBM*), eH.R.A.F. (Human Relations Area Files online database), Standardised Low Resolution Electromagnetic Tomography (sLORETA) and dipole fitting (Dipfit) for EEG source localization to the cortical grey matter.