

# Luke Vassor

POSTGRADUATE STUDENT PURSUING A CAREER IN DATA SCIENCE

Grove Cottage, Warfield Street, Bracknell, Berkshire. RG42 6AR.

☎ +44 (0) 7786 486 905 | ✉ luke.vassor96@gmail.com | 🌐 www.linkedin.com/in/lukevassor/

## Skills

---

- Programming** Python, R, Bash, SQL, Git, experience with C.
- Technical** Experimental design, data analysis and interpretation, statistical analysis, data visualisation, computations on large data sets, mathematical modelling.
- Languages** Fluent in English and competent in French.

## Experience

---

### Dr Samraat Pawar Lab, Imperial College London

Ascot, UK

POSTGRADUATE RESEARCHER (UPCOMING)

Apr. 2019 - Aug. 2019

- Upcoming Master's thesis to involve fitting and justifying the use of mechanistic mathematical models, based on thermodynamics and enzyme kinetics, to metabolic data.
- Will include the use of machine learning to explore the structure of the data set and infer model parameters.
- Project will be full-time and comprises 50% of M.Sc. mark.

### Prof Philip Newland & Dr Chris Jackson Lab, University of Southampton

Southampton, UK

UNDERGRADUATE RESEARCHER

Jul. 2016 - Mar. 2017

- Developed and orchestrated a long-term field project investigating anthropogenic impacts on endemic bat species.
- Field work conducted over university summer vacation and audio spectrogram & statistical analysis performed through winter/spring around examined taught modules.
- Work will contribute to scientific publications and influence local policy.

## Education

---

### Imperial College London

Ascot & London, UK

M.Sc. COMPUTATIONAL METHODS IN ECOLOGY AND EVOLUTION

Oct. 2018 - PRESENT

- Inter-disciplinary, taught Master's degree in Quantitative and Computational Biology.
- Manipulation and analysis of "big data" and fitting mathematical models to them within a biological framework.
- Requires the above programming languages and High Performance (multi-core) Computing to test models and run simulations.
- Quantitative modules: Maximum Likelihood Estimation, Bayesian Statistics, Probability Theory, Calculus, Linear Algebra, Mathematical Modelling.
- Includes two long projects alongside taught modules involving large simulations and comparing mechanistic and phenomenological mathematical model fits to a large dataset.

### University of Southampton

Southampton, UK

B.Sc. BIOLOGY

Sep. 2014 - Jul. 2017

- Graduated with First Class Honours.
- Developed a keen interest in Theoretical Ecology and utilising mathematical models to gain a mechanistic insight into biological phenomena.
- Planned and orchestrated multiple research projects, including data collection, wrangling and analysis.
- Publication currently in writing for field project investigating ant-plant mutualisms in Belize.
- Gave assessed presentations and represented the faculty as a science ambassador on multiple occasions, demanding an ability to communicate highly-technical subject matter in scientific and lay terms to different crowds.

### Ranelagh School & Sixth Form

Bracknell, UK

A-LEVEL AND GCSE

Sep. 2007 - Jul. 2014

- A-levels: Biology, Chemistry, Mathematics, Physics (AS).
- GCSEs: 10 including English and Mathematics.

# Extracurriculars & Part-time Employment

---

## Various

*London area & Southampton, UK*

LIFEGUARD, CUSTOMER SERVICE ASSISTANT, BARTENDER

- Lifeguard and First-aider, Bracknell Leisure Centre and Southampton University Sports Centre.
- Bartender on student bar, Ascot cocktail bar and at Wimbledon championships.
- Employed alongside A-level, undergraduate and postgraduate courses to help fund student experience & living costs.

*Aug. 2012 - PRESENT*

*Jun. 2015 - PRESENT*

## Biological Sciences, UoS & ICL

*London area & Southampton, UK*

AMBASSADOR & TREASURER

*Sep. 2014 - Jul. 2017*

- Course Representative: Represented my peers on a student and staff committee to help elicit positive changes to the course.
- Treasurer, BioSoc Biological Sciences Society: Involved book-keeping and managing funds for society events.
- Open Day & STEM Ambassador: Interacted with prospective students and parents, and provided application advice.
- "Parent" mentor: Acted as a second-year mentor for freshers, providing both academic and pastoral support.

## General

*Bracknell Forest & Southampton, UK*

MISCELLANEOUS

- Rugby, Swim team, Muay Thai kickboxing, Raise and Give student charity, Silver DofE Award.

# Referees

---

## Imperial College London

*Ascot, UK*

DR SAMRAAT PAWAR

*Oct. 2018*

- Building 2.4 Kennedy, Silwood Park Campus, Imperial College London, Buckhurst Road, Ascot, Berkshire. SL5 7PY.  
Tel: +44 (0) 2075 942 213      Email: s.pawar@imperial.ac.uk.

## University of Southampton

*Southampton, UK*

DR JAKE SNADDON

*Oct. 2018*

- Building 44 Engineering & The Environment, University of Southampton, University Road, Southampton, Hampshire. SO17 1BJ.  
Tel: +44 (0) 2380 595 389      Email: J.L.Snaddon@soton.ac.uk.