

Samuel A. Barnett

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EDUCATION

- **Princeton University** Princeton, NJ
PhD student, Dept. of Computer Science; Daniel M. Sachs Scholar at Princeton Sep. 2018 – Present
- **University of Oxford** Oxford, UK
Master of Mathematics and Philosophy; First Class; Avg. Mark: 79 Oct. 2014 – Jul. 2018
- **Ilford County High School** London, UK
*5 A*s at A Level, 1 A at AS Level, 13 A*s at GCSE* Sep. 2007 – Jul. 2014

PAPERS

- **Samuel A. Barnett.** 2018. *Convergence Problems in Generative Adversarial Networks (GANS)* (Master's dissertation). University of Oxford.
- **Samuel A. Barnett.** 2018. *What decision theory provides the best procedure for identifying the best action available to a given artificially intelligent system?* (Master's thesis). University of Oxford.

EXPERIENCE

- **UNIQ Summer School** Oxford, UK
Ambassador Jul. 2018 - Aug. 2018
 - **Mathematics Tutoring:** Worked with A-Level students through challenging, undergraduate-level mathematical problems.
 - **Admissions Preparation:** Advised prospective students on the University of Oxford undergraduate application process.
- **Machine Intelligence Research Institute** Berkeley, CA
AI Summer Fellow Sep. 2017
 - **AI Alignment:** Discussed and acquired knowledge of AI alignment-relevant technical research, with focus on reflection, logical uncertainty, and decision theory.
 - **Rationality:** Developed skills in applied and epistemic rationality, designed to help one navigate philosophically uncharted territory in AI safety research.
- **Mathematical Institute** Oxford, UK
Summer Researcher Jul. 2017 – Aug. 2017
 - **Machine Learning:** Produced a Python package to perform classification tasks on sequentially ordered data, based on the research of my supervisor, Prof. Harald Oberhauser.
- **Giving What We Can: Oxford** Oxford, UK
President Apr. 2016 – Mar. 2017
 - **Strategy:** Managed a team of students who co-ordinated strategy, self-analysis, events, social media publicity, and fund-raising for the chapter and recommended charities.
 - **Big Match Campaign:** Raised a total of £39,000 in support of the Against Malaria Foundation during two campaigns in November 2015 and February-March 2017.
- **Deutsche Bank** London, UK
Summer Analyst Jun. 2016 – Aug. 2016
 - **Emerging Markets:** Wrote a comparable analysis of the credit profile of a large multilateral development bank using bond data from Bloomberg.
 - **Financial Research:** Produced presentations analysing impact of peer-to-peer lending on the regulated financial industry, and the use of fixed income ETF flow as a wider flow metric.
- **Weizmann Institute** Rehovot, Israel
Researcher Jun. 2014 – Jul. 2014
 - **MATLAB:** Created a stochastic model of the optical properties of a quantum dot nanoparticle using MATLAB.
 - **Statistics:** Jointly produced a report entitled *Photon statistics of nano-emitters - Pulse leakage distorts perfect antibunching* and presented it to a lay audience.

• **Projects Abroad**

Galapagos Islands, Ecuador

• *TEFL Teacher*

Aug. 2013

- **Curriculum Design:** Assisted in devising curricula for the teaching of English as a foreign language suitable to students aged between 5 and 13 years.
- **Teaching:** Individually and jointly conducted English lessons in Spanish for Ecuadorean students aged between 5 and 13 years.

AWARDS

- **Part B Gibbs Prize:** Highest mark in third-year Mathematics and Philosophy (Philosophy papers).
- **Faculty of Philosophy Prize:** Highest mark in Prelims Mathematics and Philosophy (Philosophy papers).
- **Scholarship at Worcester College:** Received for performance in Prelims examinations.

SOCIETIES AND HOBBIES

- **Gymnastics Half Blue:** Received Half Blue and Half Colours for performance in the 2016 and 2018 Oxford and Cambridge Varsity Gymnastics Competition, respectively.
- **University Challenge:** Represented Worcester College, Oxford in the 2016-17 season.
- **Music:** Composed, recorded, and performed as part of a five-piece jazz/hip-hop fusion outfit.

PROGRAMMING SKILLS

- **Languages:** Python, Julia, JavaScript, and WebPPL.
- **Coursera:** Machine Learning, Deep Learning Specialisation.