

# C. Daniel Guetta

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## Education

**Columbia Business School, Columbia University** **New York, NY**

Doctoral Program, Decision, Risk and Operations Division.

2010 – 2015

- Advisors: Awi Federgruen & Garud Iyengar.
- Thesis: *Applied Inventory Management: New Approaches to Age-Old Problems*
- Relevant coursework: optimization, probability & stochastic processes, data mining & machine learning, Bayesian methods. Applications to finance, service systems, inventory management.

**St John's College, University of Cambridge, Department of Mathematics** **Cambridge, UK**

Master in Mathematics (Part III Mathematics). **Distinction** (highest possible honours). June 2010

- Courses: Time Series and Monte Carlo Inference, Actuarial Statistics, Mathematics of Operational Research, Statistical Theory, Applied Statistics, Biostatistics.
- Long essay on high dimensional variable selection.
- Horne Scholarship for academic performance, and Larmor Award (St John's highest honour for undergraduates) for "intellectual qualifications or moral conduct and practical activities".

**Massachusetts Institute of Technology – MIT (year-abroad)** **Cambridge, MA**

**St John's College, University of Cambridge** **Cambridge, UK**

B.A. in Mathematics and Physics. **5.0/5.0 GPA** and **1<sup>st</sup> Class Honours**.

June 2009

- United Steel Companies Scholarship, JP Read Prize, Johnston Year Prize, Hockin Prize and College Prize for best academic performance in the year across all subjects in college.

**Immanuel College** **Bushey, Herts**

Secondary education

June 2005

- 10 GCSEs at **Grade A\***. 7 A-Levels at **Grade A**. 4 Advanced Extension Awards. A-Level grades in Computing and Biology were amongst top five in the UK. Appointed Head Boy.

## Experience

**Columbia Business School, Columbia Engineering** **New York, NY**

**Director of the Business Analytics Initiative** (Business School, Engineering)

Jan 2018 – ongoing

**Associate Professor of Professional Practice** (Business School)

June 2020 – ongoing

**Senior Lecturer in Discipline** (Business School)

June 2019 – May 2020

**Lecturer in Discipline** (Business School)

Jan 2018 – May 2019

- Researching application of Markov Decision Processes to the design of data-driven control systems with quantifiable optimality gaps for complex, capacity-constrained inventory fulfilment networks.
- Researching ways businesses can integrate analytics into their operations to drive value; authored award-winning case studies on the subject with a number of companies. Co-authoring "Python for MBAs," due fall 2020. Presented to CBS Board of Overseers on implications for CBS's current and future analytics curriculum.
- Co-teaching "Analytics in Action," supervising eight concurrent, semester-long data science projects carried out by teams of MBA and engineering students with local companies. Projects range from predictive analytics to prescriptive analytics and visualization, and have led to changes in companies' operations and student hires.
- Developing XLKitLearn, an Excel-Python interface to expose the power of Python data science packages to non-coders through Excel. Created school's largest MBA analytics elective; course

enrolments grew fivefold in a year, attracted consistent outstanding student feedback, and was featured on the Bloomberg Businessweek podcast.

- Consulting with a number of organizations.
- Coordinating Business Analytics and Big Data curriculum, including development of innovative elective classes and leveraging existing classes within the school.
- Organizing a series of events, including case competitions, guest speakers from the university and industry, and lunch and learns for students and faculty interested in analytics.

**Palantir Technologies**

**New York, NY**

**Deployed Computational Engineer** (data scientist/engagement manager)

Oct 2014 – Dec 2014

Oct 2015 – Dec 2017

- Worked on project teams focusing on modeling and data-integration problems faced by Palantir's clients. Transitioned to owning projects with teams of up to 20 people; directed team's day-to-day work and acted as main face of the company with clients to shape strategic direction of projects.
- Created entity-resolution platform integrating data from five distinct systems for defedant's counsel in class-action lawsuit. Platform saved hundreds of man-hour of manual review. Output was approved by judge and plaintiff's counsel as ground truth, and was included in court orders. First author of patent pending.
- Designed interactive dashboard for the analysis of early-stage clinical trial data as part of pilot engagement, leading to modified plans for later-stage trials, and signing of Palantir's then-biggest pharma contract.
- Co-led 10-person team at major non-bank lender. Integrated data from multiple systems to empower business users with data to streamline loan issue process and build model to predict probability of loans closing. Project led to a restructuring of the company's data science resources to place them closer to key business stakeholders.
- Took over team responsible for troubled AdaBoost-based credit decisioning system at one of the world's largest banks. Created detailed remedial plan including strict QA and model-monitoring systems. Communicated problems and re-launch timeline to client, and oversaw successful re-launch of the model.
- Designed canonical demo of Palantir's software used in meetings with prospective clients.

**Amazon.com, Modelling & Optimization Team**

**Seattle, WA**

**Research Scientist Intern**

May 2013 – August 2013

- Researched and developed diagnostic measures and visualization techniques for various parts of Amazon's distributed supply chain. Developed prototype for a front-end GUI.

**Columbia Business School**

**New York, NY**

**Tutor and Teaching Assistant**

2010 – 2013

- MBA Decision Models and Managerial Statistics courses, and PhD Convex Optimization course.
- Re-designed review sessions from ground-up, created new case, coordinated team of TAs.

**Citi**

**Canary Wharf, London, UK**

**Summer Analyst**

Summer 2010, 10 weeks

- *Financial Strategy Group, Investment Banking Division*: re-designed FSG's Monte-Carlo simulators for company Capital Structure and Liquidity.
- *Quantitative Investor Solutions, CitiFX*: Designed Risk Management model for client from scratch. Worked on portfolio selection using sparse learning methods to hedge equity risk using currencies.

**St John's College, University of Cambridge**

**Cambridge, UK**

**Head of Physics Teaching Support**

2009/2010, year-long

- Ran drop-in sessions and examples classes. Designed, examined and graded college examinations.

**Columbia Business School**  
**Visting Scholar in the Marketing Division**

**New York, NY**  
Summer 2009, 12 weeks

- Worked on mathematical model for optimal package sizing of perishable goods.
- Attended seminar series comprising broad overview of current research in the department.

**Massachusetts Institute of Technology**  
**Graduate Teaching Assistant**

**Cambridge, MA**  
2008/2009, year-long

- Coordinated teaching staff and administered 105-student MIT Mechanics class. Students obtained highest scores in MIT in final exam. Also developed and lectured integrated approach to reviewing mechanics. Lectures were consistently packed out.
- Most highly rated instructor in student evaluations, scoring 5.0/5.0.

**California Institute of Technology**  
**Summer Undergraduate Research Fellow**

**Pasadena, CA**  
Summer 2008, 10 weeks

- Reviewed and synthesised large body of literature on biological algorithms, culminating in the design of a method for enzyme-free constant-temperature DNA quantisation.

**Zlio S.A.**  
**Managerial Assistant**

**Raanana, Israel & Paris, France**  
Summer 2007, 8 weeks

- Acted as primary advisor to the CEO of dynamic e-commerce start-up. Assisted operations which increased number of clients by about 30% in a month. Designed algorithms still used by company.
- Surveyed data from three departments to compile working summary of company's database system. Subsequently saved tens of hours of staff time within company.

**Technion, Israel Institute of Technology**  
**Research Assistant**

**Haifa, Israel**  
2003

- Programmed novel GUI system to simulate Turing Machines with application to the theory of computation and teaching introductory computer science.

## **Leadership & Activities**

**The Future Project ([www.thefutureproject.org](http://www.thefutureproject.org))**  
**Coach & Coach Trainer and Facilitator**

- Trained coaches and represented The Future Project leadership at events in New York, New Haven and Washington DC as part of the launch of new nationwide education movement.
- Mentored and coaches high-school student at Richard R. Green School of Teaching, NYC.

**Columbia University Bayit – Financial Representative**

- Responsible for large budgets in student-run food-coop.

**Cambridge University Scientific Society – Director of Publicity, Press & Marketing**

- Managed the PR team in Cambridge's largest and most active science society. Events attracted such speakers as Simon Singh, Sir Tim Hunt and Bjorn Lomborg. Raised attendance to events from 50 up to 550 as a result of publicity efforts.

**Cambridge University Triple Helix – Associate Editor**

- Edited Cambridge's peer-reviewed student Science magazine, dealing with applications of Science to Society. Co-authored a poster presented at the international AAAS conference.

**Cambridge University Jewish Society – President, Treasurer**

- Managed 30-person committee in organising over 35 events. Attracted speakers such as Maureen Lipman and Anthony Julius, over 200 people, and the attention of the national press and radio.

**Cambridge University Biology of Cells Student Consultative Committee – Student Representative**

- Mediated between student body and faculty. Persuaded committee to change focus of introductory freshman lectures following lengthy negotiations.

## **Awards, skills & interests**

- Winner of the 2018 INFORMS Case Competition
- Deming Doctoral Research Fellowship, The W. Edwards Deming Center, 2013
- Doctoral Fellowship, Columbia Business School, 2010-2015
- Awarded one of the top six spots in the UK in the British Informatics Olympiad comprising various programming tasks of increasing difficulty.
- AQA award for obtaining one of the top five A-Level Biology and Computing scores in the UK.
- Millennium Volunteers Award, awarded by the Minister for Education.

## **Outside Activities**

- Work with various NYC startups with CBS students as part of “Analytics in Action” class
- Adviser to CRM analytics company
- Advisor to an early-stage supply chain company
- Digital transformation advice for a financial consulting firm

## **Skills & interests**

### **Languages & Skills**

- Fully fluent in French (mother tongue) and English. Conversational Hebrew and tourist Spanish
- Python, R, Excel, VBA, Google Cloud platform. Ability to learn other languages to a high level quickly and efficiently.

### **Interests**

- *Sports*: Skiing and swimming. *Music*: Amateur Piano player. Amateur magician.