

## PROFESSIONAL EXPERIENCE

### Data scientist and product developer

August 2023 — ongoing

*Qatium*

*Remote*

- Spearheaded the machine learning (ML) strategy according to business goals by proactively discussing needs with stakeholders
- Constructed an ML pipeline to allow categorization of network properties with unknown labels, improving app experience for new customers (data processing, multi-label categorization, Tensorflow)
- Led an ML project to uncover underlying patterns in customer data to enhance predictive hydraulic models (time series analysis)
- Developed web applications to address complex challenges in water infrastructure management (typescript, React)

### AI resident

February 2023 — November 2023

*Apziva*

*Remote*

- Generated a state-of-the-art ML pipeline using Natural Language Processing (Seaborn, Keras) and Learn-to-Rank algorithms to reduce the cost of talent acquisition by streamlining the screening process and increasing efficiency
- Created an advanced neural network model (CNN) to assist visually impaired individuals with document scanning independently
- Forecasted financial movements using the latest algorithms including LSTM, ARIMA and Prophet in order to maximize profit

### Computational researcher

June 2019 — August 2022

*Santa Fe Institute*

*Santa Fe, NM, USA*

- Orchestrated the construction of computational models (Gillespie algorithms, stochastic modelling, optimization) for \$7 million NASA project to analyze space data for signs of life
- Devised ML approaches to look for general polymeric structures (abstracted from known biopolymers) in spectrometry data
- Furthered international collaborative efforts with leading universities to summarize key literature in a collection
- Executed independent peer review of NASA grants to select NASA's next early-career researchers developing innovative project
- Organized a workshop for 30+ emerging scholars (budget: \$67k), along with conference sessions
- Published 10 papers in high-impact journals, and presented at key conferences and universities

### CEO and Co-founder

November 2017 — June 2020

*Encelo laboratories*

*London, UK*

- Designed the business-case for non-invasively sourcing patient specific cells for biotechnological applications, leading the business to secure over £150k in private equity and over £100k in European grant funding
- Obtained 7 letters of intent from potential clients worth over £50k annually combined, and letters of support from top pharmaceutical and biotech companies
- Initiated a patent process protecting our innovation ([published](#) in 2023)

### Entrepreneur in residence

June 2017 — October 2017

*Deep Science Ventures*

*London, UK*

- Top 3% of candidates selected for the VC-backed program to solve difficult technical challenges in multidisciplinary projects while developing a deep understanding of biotech ecosystems (including health, energy, and climate)
- Built business-cases from a position of fulfilling a need and solving a problem observed in the world while disrupting the established system

## EDUCATION

Professional development, *Terra.do Software Stacks in Climate Tech*

2024

Certificate, *IBM Data Science Certificate*

2023

PhD Chemistry, *University College London*

2017

BSc Biochemistry, *University College London* - Graduated with honors in the top 5% (Dean's list)

2012

## SKILLS

**Tools** Python, Pandas, Numpy, NLP, CNN, Sci-kit, Matplotlib, Seaborn, TensorFlow, Keras, Typescript, React  
**Languages** English (fluent), French (fluent), Spanish (intermediate)

## AWARDS AND FEATURES

Peer reviewer for high impact scientific journals (*Nature Ecology and Evolution, Journal of Molecular Evolution, Life*) 2020 — 2023

Featured in [The Economist](#) and the '50 inspirational women in STEM' book 2022

Orchestrated a successful Kickstarter campaign, raising over £4000 2018

Awarded 'best talk' at a conference 2018