

# JONATHAN K. Y. TANG

jonathantang.co.uk | github.co.uk/jonathankytang | linkedin.com/in/jonathankytang

## EDUCATION

University College London

**MSc Computational Finance |**

**September 2020 – September 2021**

Relevant modules: Financial Engineering,  
Algorithmic Trading, Machine Learning  
Applications in Finance, Numerical  
Methods for Finance, Data Science

Activities: Men's Hockey Club, Data  
Science Society, EFS Society, Investment  
Society, FinTech Society

Goldsmiths, University of  
London

**BSc (Hons) Computer Science |**

**September 2017 – June 2020**

Result: First Class Honours

Thesis: Deep sequential learning for  
option pricing (79%)

Relevant modules: Advanced Algorithms  
and Data Structures, Machine Learning,  
Neural Networks, Mathematical  
Modelling

Activities: Hockey Club (2019-20 President  
& 2018-19 Secretary-Treasurer), Chamber  
Choir, Hacksmiths Tech Society

## COMPUTING SKILLS

### Languages

Python, C++, Java, R, Matlab, MySQL,  
MongoDB, JavaScript, HTML, CSS, LaTeX

### Tools

Git, AWS, Jupyter, Tableau

### Operating Systems

MacOS, Linux/Unix, Windows

## VOLUNTEERING

ICC Men's Cricket World Cup 2019

**Cricketeer | June 2019 - July 2019**

- Placed in the Spectator Services team,  
at Lord's Cricket Ground, London.

England & Great Britain Hockey  
**Hockey Maker, Women's World Cup 2018  
| June 2018 - August 2018**

- Placed in three divisions: Logistics,  
Event Services (Access Control), and  
Spectator Services.

## LANGUAGES

English & Cantonese Chinese – Bilingual  
Proficiency (Written and Spoken)

## PROFESSIONAL EXPERIENCE

**CITI | London**

**Global Markets Technology Summer Analyst | June 2020 - August 2020**

- Internship adapted to training program due to COVID-19.
- Delivered weekly presentations on data analysis & visualisation using Python and PowerBI, cloud technologies (AWS), UX/UI, REST APIs, DevOps, and machine learning.
- Self-organised sessions in technology and quantitative teams across all asset classes.
- Received full-time offer for Summer 2021 start.

**DEUTSCHE BANK | London**

**Strats Summer Analyst | June 2019 - August 2019**

- Placed in Cross-Business Strats team, focusing on the FX global markets.
- Created profit and loss forecast models for all FX trading desks, using Python, Clickhouse, and Tableau. Presented the findings to FX Finance.
- Worked in an Agile team to develop a deep learning news article sentiment analysis system using Python, TensorFlow, and Keras.
- Received full-time offer for Summer 2020 start.

**GETRENTR | London**

**Machine Learning & Data Science Intern | June 2018 - September 2018**

- GetRentr is an AI-PropTech start-up that aggregates property regulation and compliance data in relation to the private rental sector
- Collected, cleaned and aggregated over 300,000 properties from leading rental websites for presentation to the Greater London Authority and Ministry of Housing.
- Worked in a team to build a machine learning prediction cost model based on the property rental market.
- Conducted natural language processing tweets and news articles about property rental market compliance for internal use on Slack.
- Visualisation of over 4.8 million companies from the HM Companies House database to track rogue landlords.

**JOHN LEWIS PARTNERSHIP | London**

**Retail Data Analytics Intern | August 2016**

- Reporting on in-branch vs. online sales in under-performing catchment areas, using the Acorn demographics data set.
- Analysis of 2000 NPS surveys on navigational aspects of the website, and using data from Adobe Omniture to increase user experience.

## PROJECTS

**Deep Sequential Learning for Option Pricing**

- Investigation into the performance of deep learning models and state-space estimation algorithms for pricing and forecasting European-style call option prices.
- Used Python (with TensorFlow and Keras), and Matlab.

**Augmented Reality Navigation System for Commercial Spaces  
([link](#))**

- Researching and creating an augmented reality indoor museum navigation system with the A\* path-finding algorithm.
- Developed for Android devices using Java, Kotlin, and ARCore
- Enforced Agile with Scrum SDLC, with the Scrum Master role.

**European Union and Global Trade Visualisation ([link](#))**

- Visualising over 90 datasets from Eurostat on imports and exports of goods and services within the EU28, along with other key international trade countries.
- Using JavaScript (p5.js, d3.js, c3.js), HTML, CSS, Python, and the Google Maps API.