

Mohit Raj Vellore

Email: mohitvellore@gmail.com

LinkedIn: www.linkedin.com/in/mohitvellore/

Mobile: +44(0)7393175560

GitHub: www.github.com/MohitVellore

Education

Bristol, UK	University of Bristol	Sept 2021 – Jul 2024
<ul style="list-style-type: none">BEng Engineering Mathematics		Classification: 2:1
Watford, UK	Watford Grammar School for Boys	Sept 2019 – Aug 2021
<ul style="list-style-type: none">A Levels: Mathematics (A*), Biology (A), Chemistry (A), Economics (B)		

Programming Languages

- Intermediate: MATLAB, Python, R
- Beginner: C, SQL

Experience and Academic Activities

- Project: "UFC Fight Forecast: Predicting Winners, Methods, and Rounds"** **Jul 2024 – Present**
- Aiming to analyse UFC fight statistics and video footage to make informed predictions for matches.
 - Implement web scraping scripts to collect and preprocess data on fighters in upcoming UFC bouts.
 - Develop machine learning models to predict fight outcomes, including the winner, method of victory, and round.
 - Integrate computer vision to analyse fight footage, deriving custom statistics for boxing, clinch, and submissions, enhancing predictions with real-time data visualisation and advanced combo analysis.

- Technical Research Paper: "Mathematical Modelling of the Peloton"** **Sept 2023 – May 2024**
- Constructed an agent-based model to analyse two-player games and peloton dynamics in competitive sports and professional road cycling, optimising player performance for a chosen criterion.
 - Employed differential game theory, discrete physiological modelling, and parallel/high-performance computing to facilitate in-depth analysis, improving player performance up to 37%.

- Albourne Partners – Risk Advisory Associate (Summer Intern)** **Jun 2023 – Sept 2023**
- Research & Stakeholder Recommendations:** Conducted independent research and presented quantitative and qualitative findings to senior leadership across multiple teams. Analysed the statistical significance of interest rates and traditional risk factors on hedge fund strategies, providing actionable insights for implications of future investment decisions.
 - Data Analysis & Model Development:** Developed a statistical algorithm to proxy various factors for private market clients using NAV per vintage, now a critical part of an economic-based multi-asset risk and return simulator, used by over 100 clients.
 - Optimisation and Decision Making:** Designed an advanced algorithm to identify the 100 most diverse portfolios based on asset classes, target weights, and existing allocations. Evaluated portfolios on returns, volatility, and allocation to private markets.

- London Institute of Banking and Finance – Student Investor Lead Analyst** **Nov 2019 – Feb 2020**
- Led a team of four in managing a virtual £100,00 long- and short-term investment portfolio.
 - Achieved a top 0.2% global ranking with an average portfolio return of 32%, advancing to the semi-finals.

Leadership & Extracurricular

- Cagefit Gyms – MMA Competitor & Coach** **Jan 2020 – Present**
- Competed across England, raising over £1,500 for charity from ticket sales.
 - Instructed daily classes comprising of 15-25 students in Wrestling, Muay Thai, BJJ and MMA.
 - Trained 1900+ hours attaining a Black belt in Karate, Blue belt in BJJ and a 10 – 2 record.
- Batchworth Golf Club – Captain of Jr Golf Team & Player** **May 2016 – Sept 2022**
- Achieved a handicap of 6 and won 12 tournament trophies and 4 awards.
 - Captained under-16s and under-18s tournaments of 6+ players.

Certifications & Interests

- Certifications:** FRM, J.P.Morgan virtual experience, Future IM/PACT virtual experience, First Aid.
- Interests:** UFC, Cycling, Long Distance Hiking (DoFE Gold), Car Spotting, Powerlifting.