Taunton, Somerset, United Kingdom

+44 (0) 7920 795254

[johnduffymsc@gmail.com](mailto:johnduffymsc@gmail.com)

github.com/johnduffymsc

www.linkedin.com/in/johnduffymsc

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| John Duffy | | | | | | | |
|  |  |  |  |  |  |
| A December 2020 MSc Scientific Computing graduate from UCL (Distinction) with previous military service and commercial experience.  With a BEng Electrical Engineering from Imperial College, equipped with a strong understanding of computing from high-level software design, down to the low-level hardware execution.  Actively seeking a position as a C++/Python software developer in a proprietary trading firm or hedge fund, or as an ML software engineer in a firm developing cutting-edge AI. | | |  | MSc Scientific Computing  UCL (Sep 19 – Dec 20)  Distinction achieved on completion of the following courses: High Performance Computing  *Python, NumPy, Numba, NumExpr, OpenCL, Linear Algebra*  Research Software Development in C++  *C++, CMake, Eigen, Git, Travis*  Software Engineering with Python  *Python, NumPy, K-Means Clustering, pytest, Git, Travis*  Machine Learning and Big Data  *Python, Pandas, Seaborn, scikit-learn, TensorFlow*  Numerical Methods  *Numerical methods for solving Non-Linear Equations, Linear Systems and Ordinary Differential Equations*  Numerical Optimisation  *Line Search, Trust Regions, Conjugate Gradient, Quasi-Newton and Constraint Optimisation methods*  Computational and Simulation Methods  *Finite Difference and Finite Element methods for solving Partial Differential Equations*  Mathematics and Statistics of Algorithmic Trading  *Market Microstructure, Optimal Execution, Pairs Trading*  Software Developer and Helicopter Pilot Freelance (Jan 18 – Sep 19)  Oracle Certified Professional Java SE 8 Programmer training and freelance offshore and VIP helicopter pilot.  Helicopter Pilot CHC, Bond (Jan 02 – Jan 18)  Offshore helicopter pilot, operations manager and Technical Lead for a £2 Billion bid to provide Search & Rescue (SAR) helicopter services to the UK Government.  Naval Officer and Helicopter Pilot  Royal Navy (Jan 90 – Jan 02)  Leadership skills honed as the pilot and Commander of a Seaking helicopter operating from Royal Navy frigates and destroyers, aircraft carriers, and in the Scottish Highlands. | | |
|  |  |  |  |
| MSc Scientific Computing UCL  BEng Electrical Engineering  Imperial College  Certificate in Securities  Securities Institute  Certificate in Derivatives  Securities Institute | | C++, CMake, Catch2, GoogleTest, GoogleBench  Python, SciPy, NumPy, Numba, NumExpr  Pandas, scikit-learn, Keras, TensorFlow  C, OpenCL  Rust  Linear Algebra, Numerical Methods  Linux  Git/GitHub, Travis  Oracle Certified Professional, Java SE 8 Programmer  Operations management, Techinal Lead for a £2 Billion bid, bid writing, presentation, leadership, commercial and regulatory responsibility | |