

Jason Dominguez

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EDUCATION

University of Manchester <i>Completed 1st year of Comp Sci. PhD in Generative Deep Learning</i>	Manchester, UK Sep. 2021 – Mar. 2023
University of Manchester <i>1st class MPhys in Physics (82%)</i>	Manchester, UK Sep. 2017 – June 2021
Thomas Hardy Sixth Form <i>A levels: Maths (A*), Physics (A*), Music Tech (A), AS Further Maths (A)</i>	Dorchester, UK Sep. 2015 – June 2017

TECHNICAL SKILLS

Languages: C/C++ (7+ years), QML, Javascript, Python
Softwares & Frameworks: CMake, Qt, Git/GitHub, Qt Creator, VS Code

EXPERIENCE

Junior C++/Qt/QML Software Developer <i>Vochlea Music</i> <ul style="list-style-type: none">Led feature development for greenfield ML-based audio processing iOS app (MacOS/Unix)Worked with a design team to implement modern UI/UX in QML from Figma specificationsIdentified and resolved race conditions in concurrent C++ codeProfiled iOS app and reduced memory spikes and memory leaks by optimizing C++Wrote unit tests using QTest for a mix of BDD & TDD methodologies	Nov. 2023 – Current <i>Remote/London, UK</i>
Associate C++/Qt Software Developer <i>Carallon</i> <ul style="list-style-type: none">Development & bug-fixing using Visual Studio for Windows desktop apps and firmwareProblem solving with the UI (Qt), backend logic and networking between devices (TCP/IP, Lon)Used Git for version control and Jira for workflow management	Apr. 2023 – Nov. 2023 <i>London, UK</i>
Programming In My Degree <i>University of Manchester</i> <ul style="list-style-type: none">4th year: Object-Oriented Programming in C++ (96%)4th year: Machine Learning (ML) and Optimization (91%)	Sep. 2017 – June 2021 <i>Manchester, UK</i>

PROJECTS

Options Pricing <i>C++, Options Pricing, BSM, Binomial</i> <ul style="list-style-type: none">Currently working on implementing pricing methods for different financial options, furthering my understanding of financial derivatives pricing. Available HEREUnderstanding of American, European & exotic put/call optionsUnderstood & implemented BSM and Binomial models for pricing	2024 - Current
Award-Winning Publication in ML for Liquid Crystals <i>Python, TensorFlow</i> <ul style="list-style-type: none">Applied ML computer vision to identify different liquid crystal phases from their texturesPublished three co-authored papers in top-tier soft matter physics journals. Available HEREOne of these publications was the winner of The 2023 Luckhurst-Samulski Prize	2020 - 2023

HOBBIES

Music | *Drums, Guitar, Vocals, original compositions*

- I play musical instruments including: drums, guitar, bass, Canarian timple
- I've written music which has been professionally recorded, available [HERE](#)