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Application for 2024 Internship at QRT

Dear Sir or Madam,

I am a Computer science undergraduate student at Durham University, final year thesis title: Multi-Level thinking in AI, Modelling Abstraction. I am skilled in modern development tools, several programming languages and web/3D technologies with over 5 years of development experience. Interested in Machine Learning, Neural Networks, Physics Engines and Game Design. I am seeking a summer internship from June - September 2024, as I am intending to enrol into a Masters programme from October 2024 onwards.

I am interested in applying machine learning to fintech and investment banking. I love designing optimal architectures and I have a passion for writing efficient, low level C/C++ code. I really want to gain experience in designing scalable optimal infrastructures and optimising across distributed systems.

I am currently learning about writing performant game engines in C++ using the Data Oriented Paradigm. I have implemented my own version of Entity Component System (ECS) to maximise parallelism and cache efficiency. The problems I enjoyed solving involved fragmentation of datatypes in the ECS database and writing efficient query algorithms for obtaining and iterating sets of entities.

I won the NWG Hackathon in 2023 and Durhack in 2022. I believe that I can contribute positively at QRT with my diverse experience thus far, having worked at startups (Poly AI), industry (Toshiba, MediaTek, AIXTRON) and academia (Durham University) for roles in both commercial and research environments.

Yours sincerely,

Christopher Teo