

Dear IMC,

I have strong research experience in quantitative fields, particularly in mathematical modelling, analysis, and cryptography, gained during my time in the Honours Mathematics and Computer Science program at McGill. For the last few months, I have been self-studying *Options, Futures, & Other Derivates* by John Hull, and, this semester, I am taking coursework in Quantitative Risk Management, Stochastic Processes, and Homological Algebra. After graduating this May, I am excited to work with, and eventually develop, quantitative financial tools.

While at McGill, I completed a project supported by the National Science Foundation on computational neuroscience. My senior thesis is on algebraic methods in cryptography. Some of my coursework includes numerical analysis, machine learning, probability, game theory, Galois theory, and algorithms. I have taken completed projects and programming classes in C++, OCaml, Python, Java, and C. I am a quick, flexible learner, and my GRE scores are 170/165 quantitative/verbal. My personal projects, mostly in front-end development and mathematics, can be viewed at [nicholashayek.com](http://nicholashayek.com). I am a strong analytical thinker, work great under pressure, and aim to use these skills at IMC as a broker trader, where I hope to eventually secure a position in quantitative development.

Best,

Nicholas Hayek