

Dear D.E. Shaw,

I have strong research experience in quantitative fields, particularly in mathematical modelling, cryptographic systems, and machine learning, 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 a graduate-level course in Quantitative Risk Management. I am eager to research and develop quantitative tools after graduating this May.

While at McGill, I have completed a project supported by the National Science Foundation on the computational neuroscience of alcohol addiction. I have completed coursework in numerical analysis, statistics, probability, discrete mathematics, machine learning, optimization, and algorithms; I have taken programming courses in C, Java, Python, C++, OCaml, with additional expertise in data science tools and JavaScript. I am a quick, flexible learner, and my GRE scores are 170/165 quantitative/verbal. My passion projects, mostly front-end development, can be viewed at nicholashayek.com.

Best,

Nicholas Hayek