

Dear National Bank,

I have strong research experience in quantitative fields, particularly in data modelling, risk management, machine learning, and algebraic 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 and Stochastic Processes. I am excited to work with, research, and eventually 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. Some of my coursework includes numerical analysis, Galois theory, statistics, probability, game theory, and algorithms. I have taken programming classes in Bash, 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 personal projects, mostly in front-end development and mathematics, can be viewed at [nicholashayek.com](http://nicholashayek.com). I am a strong analytical and abstract thinker, work great under pressure, and aim to use these skills at National Bank while performing data analyses and visualizations, where I hope to eventually secure a position in risk management.

Best,

Nicholas Hayek