

Re: Enda Flynn

9 November, 2020

To whom it may concern,

Enda Flynn (C15586917) entered DT205 Bachelor of Science (Hons) Mathematical Sciences in September 2015 and achieved a first class honours classification in June 2020.

In the first year of his studies, I taught Enda for a year-long 10ECTS module in C programming. This module is typically found to be very challenging by first-year students; by achieving a high grade of 64, he demonstrated a clear aptitude for technical subject materials.

Subsequently, Enda has taken three 5ECTS taught modules in financial mathematics with me. The first of these was an introductory Stage 3 module with a capped grade. More recently, he achieved 90 and 80 in Stage 4 Financial Mathematics I and II respectively – these are remarkably high grades and show a natural ability for technically challenging mathematics in an applied setting. In class, he consistently proves himself to be an exceptionally bright student with en excellent work ethic. I have also noted that he interacts positively with his peers and collaborates readily with them on assigned problems.

I also supervised Enda for a 15 ECTS final year projects on **Affine Term Structure Models** for which he achieved an exceptionally high grade of 85. During the course of this project, he was enterprising and diligent in his independent learning into the financial context and mathematics of interest rate modeling. Enda took charge of any task assigned to him and impressed without exception by his rate of progress and preparedness for our discussions. As a noteworthy indication of his abilities, he wrote his own codes in Python, a language he learned specifically for this project, to investigate affine termstructures of interest rates via both Monte-Carlo methods for stochastic differential equation formulations, and Runge-Kutta integration for systems of ordinary differential equations derived via the treatment of Duffie and Kan.

Enda has demonstrated a level of confidence and independence I would usually expect see in a capable graduate student. He has worked efficiently in scanning a broad literature and narrowing his focus to the aspects which he determined fit best to his work. On a number of points, his work has been innovative and produced interesting results.

OT Baile Átha Cliath Campas Shráid Chaoimhín D08 NF82, Éire Enda is an outstanding student academically, as supported by his winning the John Forde medal jointly this year. He is a highly engaged and diligent student with a very positive attitude to work and learning. I would have no hesitation in recommending him in the strongest terms.

If you require any further information, please feel free to contact me directly.

Yours sincerely,

Dr Stephen O'Sullivan

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