

McGill University  
School of Computer Science  
McConnell Engineering Building  
3480 Rue University  
Montréal, QC  
H3A 2A7

October 25, 2021

Dear Professor Tarlow,

As a Ph.D. student in computer science at McGill University, I am interested in the intersection between statistical learning, developer tools and programming languages. Over the last three years, I have been developing tools for evaluating neural program synthesizers. In particular, my research has focused on automated testing and validation. Among my other interests, I am also passionate about user experience, teaching, and organizing workshops and reading groups.

I hope to devote the next three years towards developing a theory of semantically admissible program transformations and probing the comprehension of neural language models in understanding various computational languages. I believe those tools will be useful as a benchmark for evaluating the systematicity of neural code completion models. I am also interested in developing a DSL for probabilistic programming and probabilistically testing deterministic programs.

As you may be aware, McGill University requires doctoral students to form and meet with their supervisory committee on an annual basis. In consultation with my co-advisors Drs. Guo and Si, and considering your extensive background in neural program synthesis, we believe this committee would be enriched by your participation and invite you to formally serve as a member. While a formality, I would personally value your input as a student and admirer of your work.

I appreciate your consideration and am eager to receive your reply.

Sincerely,

A handwritten signature in black ink that reads "Breandan Considine". The script is cursive and fluid, with the first name and last name clearly distinguishable.

Breandan Considine