

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

October 26, 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 ability of neural language models to comprehend computational languages of varying complexity. I believe our work will also have practical applications for benchmarking 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 fluid and cursive, with the first name and last name clearly distinguishable.

Breandan Considine