

ALEXANDER SCHAAP

SOFTWARE ENGINEER

Hamilton, October 15, 2019

Dear Hiring Manager,

I am passionate about technology. I enjoyed building with Lego for as long as I can remember, but I discovered Linux in grade 10—I was hooked on learning more and developing solutions with the power it gives its users. My PhD research on typed code generation allows me to contribute in novel ways to software, particularly where program families and modularization are significant. Proven industry experience has made me an effective communicator.

I believe that my research can be applied to benefit existing and new software projects. My research consists of creating program family generators, whose output approximates hand-written code, minus much of the function-call overhead. While variabilities in software product lines typically consist of low-level design choices such as sorting algorithms or data structures, there is untapped potential in including choices such as programming paradigm and architecture. Using a typed metaprogramming approach guarantees that the generated code is both syntactically and semantically correct. Much of the Research Assistant work essentially revolved around software design and good practices, as well as collaboration. As an open source enthusiast, I try to give back to the community however I may.

Creating products and services that can improve everyone's lives is a meaningful goal to pursue. Google has distinguished itself as a company that values intellect, diversity and creative solutions, while also truly listening to employees—regarding project Maven and project Dragonfly, for example. I also believe that Alphabet's extensive range of products and services via its many subsidiaries is a sustainable approach to thriving in ever-changing markets. Finally, “you can make money without doing evil” are words to live by.

I am confident that my expertise and passion will prove to be an asset to Google. Thank you for your time and consideration. I look forward to hearing from you and further discussing my qualifications.

Sincerely,

Alexander Schaap