July 3, 2020

Search Committee
Programming Languages Group, TUDelft
Delft, The Netherlands

Dear Search Committee,

I am writing to apply for the Assistant Professor position advertised by the Programming Language Group, TUDelft (TUD00153). I am currently working as a Research Fellow with Toby Murray in the School of Computing and Information Systems, University of Melbourne, Melbourne. My research area is primarily focussed on formal verification of mission critical software programs. However, I am willing to explore the areas to make the formal verification accessible to everyone by means of designing new programming language .

Below is my response for every point in the job advertisement:

1. *Conducting high impact research in the area of programming languages:* since my PhD, I have published paper in the conference like ACM Conference on Computer and Communications Security (CCS), Interactive Theorem Proving (ITP), etc. I intended to continue do so, but now focussing to a broader community, security and programming languages.

2. *Supervising PhD students and helping them to become top researchers in programming languages:* this is the joy of being academic. I still remember my PhD days when me and my supervisor would discuss the problems for months before reaching any solution. My goal to be a researcher like Dirk Pattinson, who was never afraid of saying that he does not know the solution, but together we will figure out.

3. *Teaching courses on programming and programming languages topics at the bachelor and master's level in the TU Delft Computer Science curriculum:* I have already addressed this in my teaching statement.

4. *Supervising bachelor and master's students in their graduation projects:* I have already evaluate the thesis of three master's students at the university of Melbourne, so I am totally capable of doing this.

5. *Acquiring and managing externally funded research projects in programming languages:* This is something I really like to do because it validates that my research is necessary in advancing the human knowledge, and at the same time, the output of my research is practical.

6. *Collaborating with industry to ensure that the group's research results have a lasting impact in software development practice:* In order to achieve this goal, I would like to develop the accessible formal verification techniques in collaboration with industry. I believe the ultimate success of any research software is to be used in industrial setting, or at least those ideas are adopted by industry.

7. *Strengthening the contacts between the group and industry as well as other international academic institutions:* To achieve this step, I would like to continue my collaboration with University of Melbourne and researchers from Australian National University. In addition, I would like to explore the links with INRIA, France.

8. *Taking responsibility for management and committee work within the section and the department:* I understand that these obligations are also a part of being academic, and I would be more than happy to do it.

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