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Nijmegen, October 12<sup>th</sup> 20223

Dear madam/sir,

It is with great enthusiasm that I am writing this letter in support of Zeynep Ruveyda Özel's application for a PhD position. I know Zeynep as a strongly motivated and hardworking student with excellent communication skills. I got to know Zeynep in 2021 as a MSc student in the Data Science Master's program at the Center for Research and Interdisciplinarity (CRI) at the Université de Paris Cité where I was a junior group leader at the time. At CRI, my group focussed on the development of novel experimental and computational tools to study mosquito behavior. We had a particular interest in the egg laying behavior of mosquitoes and were looking for ways to automatically quantify the number of eggs a mosquito laid in a specific experimental context. In a typical laboratory environment this task is performed manually which is rather labor intensive, a computational tool was therefore desired for this task. Zeynep set out to tackle this challenge, however as my group at the time did not have extensive experience with deep learning methods (yet), Zeynep had to develop large parts of the methodology from scratch. Perseverant as she was, Zeynep worked hard to teach herself the required skills and she invested strongly in familiarizing herself with the different approaches and opportunities that would allow her to complete this task. During the project she tested different neural network architectures to segment very crowded images and developed tools to aid the annotation process. While in the end the internship was too short to complete a working application, Zeynep's efforts were valuable for several projects in my group, and I she gained a variety of skills that prepare her well for a PhD in AI and computer vision related domains.

Our interaction was shaped by the unusual circumstances at the time as the COVID epidemic was in full swing, and most teaching and mentoring happened online. While this was a challenging time for everyone, Zeynep gracefully confronted these challenges and performed the entire project online. This was her first MSc internship, and I was impressed by the level of independence that she displayed. She also showed great communication and organizational skills making our regular meetings useful and efficient.

I strongly believe Zeynep has tremendous potential and I believe a PhD in AI would be an excellent start of a fruitful career in research.

Sincerely,



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