September 22, 2015

To the AAAI-16 Doctoral Consortium Committee,

Attending AAAI-16 gives me an excellent opportunity to learn how the AI community can assist in my dissertation topic. During the next year I will be preparing my proposal, and by attending AAAI-16 I have the opportunity to discuss my research directions with experts in the field.

My dissertation develops robot learning from demonstration techniques and tools for individuals with Amyotrophic Lateral Sclerosis (ALS). This requires working with robots in high-dimensional state spaces. Learning in these high-dimensional state spaces with suboptimal and infrequent demonstrations are the challenges in this work. The scalability and robustness requirement in my research is applicable in many artificial intelligence applications outside of my own. The algorithm I have developed leverages knowledge in transfer learning, learning from demonstration, reinforcement learning and dimensionality reduction. This gives me a broad understanding in many AI topics. In the doctoral consortium I can contribute by presenting and discussing a new algorithm, as well as assist others with my background knowledge.

I usually submit to the International Conference on Robotics and Automation (ICRA), the International Conference on Autonomous Agents and Multiagent Systems (AAMAS), the Conference on Human-Robot Interaction (HRI), and this conference. I am not submitting to any other doctoral consortium this year, and I have not attended one in the past.

Thank you,
William Curran