

My partner for this assignment is Ryan Thomas, a fellow first-year student who is also interested in CSE. Ryan is looking to get involved in technology and its community. He's looking forward to rounding out his experience in his field of interest through experiential learning opportunities.

Ryan's interest in CSE is particularly strong in the sub-field of machine learning and artificial intelligence. Though he knows he doesn't yet have the technical background to dive into research in this field right away, he's studying the subject on his own outside of his CSE 143 coursework, with the intention of getting himself ready to start research in the foreseeable future. One project within the UW CSE Machine Learning group that he finds particularly appealing is called Tractable Deep Learning (<https://www.cs.washington.edu/node/8805>). The project aims to develop new models of deep learning that both capture the complexity of the real world and remain orderly enough to allow inference to be drawn from their structure. This research provides insights into learning and information structuring and demonstrates how to build computing systems that are better able to handle uncertainty and complexity. Dr. Pedro Domingos, the faculty member at the forefront of this effort, would be a great person to contact to get involved.

Ryan is also interested in taking on a leadership role within the CSE community. The UW ACM chapter (<https://www.cs.washington.edu/acm/>) has several officer positions; Ryan wants to outreach to others and build a strong community, and he prefers to be driving the organization of events rather than exclusively publicizing them. Thus the Event Coordinator role is a good fit for his interest. In this role, Ryan would help organize the numerous events that ACM runs, such as industry guest speakers, research nights, mock interviews, career development info sessions, and social dinners and barbeques.

Ryan would like to pass along his knowledge of CSE to younger students as well. Ryan didn't take his first programming class until twelfth grade, and it was not until after he submitted his application to UW that he discovered that CSE was really the field he was most passionate about; he wishes in retrospect that he'd found programming sooner. He currently tutors two children pro bono, one in middle school and one in high school, in math and some basic HTML coding. In the past, the focus of their tutoring sessions has been mainly on homework help, but he sees an opportunity to extend his service work by creating programming project assignments himself that would challenge his tutees in ways tailored to their individual capabilities and learning styles. This would allow the students to build valuable computational thinking skills and jump-start their exploration of CSE free of charge.

These potential endeavors in research, leadership, and service would allow Ryan to act on his passion for technology in a variety of ways, building unique skill sets outside of the classroom.