Recommendation Letter for Alexander Wallar

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Dear Committee,

I am hereby providing a letter of recommendation to support his application of Alexander Wallar for the Ph.D. program at your institution. I was his supervisor during his summer internship at the Naval Center for Applied Research in Artificial Intelligence at the Naval Research Laboratory during the summer of 2014.

Alex is an outstanding student with full of drive and enthusiasm with a great willingness to learn and to contribute to research. A Ph.D. will provide Alex the opportunity to continue his research under the supervision of experts in the field, further strengthening his ability to conduct high quality research in computer science and robotics.

Alex applied for the Naval Enterprise Research Internship Program and I accepted him to work for the Distributed Autonomous Systems Group that I lead in the summer of 2014. Alex worked on a path planning algorithm that enables a team of unmanned aerial vehicles to efficiently conduct surveillance of risk sensitive areas. The algorithm he developed was able to survey a given area whilst minimizing the risk of damage to the vehicle and maximize the quality of the captured sensory information. Alex developed the algorithm in simulation and on physical quadrotors (AscTec Pelicans) using the Robotic Operating System (ROS). He also developed a middleware that extended ROS to seamlessly supports multiple robots. The work Alex completed over the summer led to two paper submissions, one conference paper that was accepted and a journal paper that is currently under review. Alex will be working in my lab during January of 2015 has a student contractor.

The quality of research and work ethic Alex exhibited goes beyond the expectations of a undergraduate summer intern and is what should expected from a graduate student conducting research in robotics. This demonstrates Alex's ability to solve challenging problems, to work independently, and to succeed in a Ph.D. program.

In summary, I fully support Alex's application to pursue a Ph.D. at your institution. Alex has exhibited his ability to conduct research in robotics and to prepare this research for publication and acceptance in the research community. The Ph.D. program will provide Alex with opportunities to continue his research and prepare him for a career in academia. Please feel free to contact me if any additional information is needed to support his application.

Sincerely,

Donald Sofge