

October 30, 2020

Dear Undergraduate Award for Research Selection Committee,

It is with great pleasure that I nominate Cody Charland for Outstanding Undergraduate Award for Research. Cody was my student in two graduate courses, and I served on his MS thesis committee. In my interactions with Cody, I found him a top student and hardworking researcher.

Cody's MS thesis, entitled "Autonomous Aerial Search and Mapping of Unknown Built Environments," makes a significant contribution to the field of autonomous navigation with applications in the search-and-rescue domains. His thesis introduces a method to exploit building structure for autonomous navigation and shows how this method improves efficiency in mapping the environment. The contributions of this thesis can have an impact on how autonomous aerial vehicles are employed in search and rescue missions in a disaster areas.

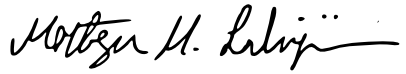
Cody was a top student in two of my graduate-level courses. In ASEN 6519 Hybrid System course, which is a PhD-level class, he was an active participant in the classroom discussions. He showed a great capability to process new information quickly and come up with fundamental questions. His performance was so impressive that I thought he was an experience PhD student at first. It was a great surprise for me to find out that he was actually a senior undergraduate student at the time. For the final project of the class, he took on an ambitious problem, and within a few weeks, he was able to solve the problem and turned in a high-quality report.

Cody is a remarkable person. As a student, he never came short in impressing me with his questions and answers to my open-ended questions. As a researcher, he has made a significant contribution to autonomous aerial systems despite the short time he had to develop

his thesis. I believe he is highly deserving of the Outstanding Undergraduate Award for Research.

Please feel free to contact me should you need further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Morteza H. Lahijanian". The signature is fluid and cursive, with a long horizontal stroke at the end.

Morteza Lahijanian

Assistant Professor

Aerospace Engineering Sciences

University of Colorado Boulder