

September 4, 2025

Steve Matousek, Mars Exploration Program advanced studies manager NASA Jet Propulsion Laboratory

Dear Dr. Matousek,

We are a group of senior electrical and computer engineering majors currently in our senior design class at the University of Colorado in Boulder. Our group name is Jurassic Spark, and we would like to reach out to you with the utmost enthusiasm about the possibility of working on your exciting project! We find many aspects of developing a hard lander that can be deployed anywhere on Mars incorporates unique challenges that excite us. We are particularly drawn to the fact that this project is multidisciplinary in nature, combining concepts in hardware reliability, embedded systems, and cost management, with very real aerospace applications.

Our team believes that we are the most suited to meet and exceed the deliverables required for your project in an effective and efficient manner due to our variety in backgrounds and technical skills, including PCB/circuit design, real-time embedded systems, FPGA design, Linux-based systems development, RF engineering, networking and security. Between us, we have participated in over 10 internships and research teams, where we contributed to inderdisciplinary engineering efforts. If you are curious about the scope and some technical details about these experiences, attached in the email along with this letter should be a list of each group member with their respective skills and experience.

By choosing us for this project, you are not only giving us the opportunity to demonstrate our expertise and contribute to your efforts to make learning about Mars more cost effective and easier to repeat, but would be giving us an exciting set of challenges that we can't wait to tackle together. We would greatly appreciate the ability to be a part of your team, and we are excited at the prospect of contributing to you and NASA's JPL division in your efforts to develop cost effective hard landing kits for data collection under extreme conditions.

For questions and discussions about how we can be a part of your group, please feel free to reach out to our team's point of contact, Logan Caskey, at logan.caskey@colorado.edu, or at his phone (303) 521-1772. We appreciate your time and consideration, and hope to hear from you soon.

Sincerely,

Jurassic Spark Senior Design Team University of Colorado at Boulder