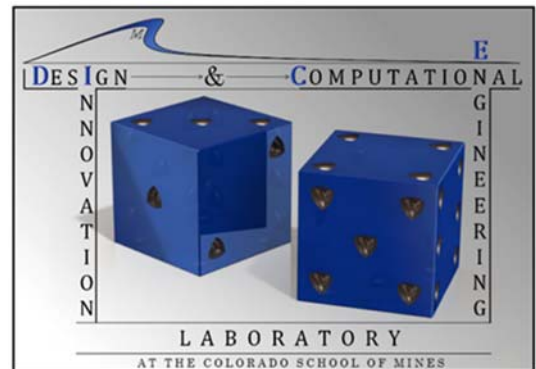


## Quadcopter Operation via Google Glass

The Design Innovation and Computational Engineering Laboratory (The DICE Lab) is looking for a talented computer science student team to pioneer one of our research efforts. One of our projects is in need of code development for use with a repository of design analogies. We have several quadcopters available in our laboratory with the goal of developing collaborative swarm operations. Some of the members in this swarm may be humans, working in collaboration with robots. We seek to develop a Google Glass app, which will allow a human to collaborate with a quadcopter carrying a camera.

The app should allow the following:

- Display of the camera feed and other vital statistics on the screen.
- An interface allowing the user to direct the quadcopter
- A mode where the quadcopter maintains relative position with respect to the operator
- Storage of the telemetry data (including the video feed) online.



We hope to employ a flexbot or a parrot drone. We have a google glass on-hand for use in the project.



Flexbot



Parrot



Google Glass

This work offers other unique opportunities:

- Collaborate with current graduate students at CSM
- Support the development of a research grant on
- Develop work experience highly relevant to a future industry position or graduate education.
- Use cutting edge hardware
- Work in an environment that respects your talents! We are not looking for someone to just write code. We are looking for a student who can envision a piece of scientific software, and will consider any ideas or suggestions for improving, restructuring, or modifying the software in question.

If you are interested in this project, please contact: Dr. Cameron Turner by email at [cturner@mines.edu](mailto:cturner@mines.edu), or in person in Brown Building W370B.