

## RESEARCH INTERNSHIP IN SCIENCE & ENGINEERING PROGRAM

SYMPOSIUM ABSTRACTS
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## **Crowdsourced Annotation through Gamification**

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Segmentation and tracking are extremely useful when observing the motion of objects and studying the behavior of groups using that data. However, because automatic annotation by computers is not yet accurate, humans must manually annotate the data in order to receive accurate results. Manual annotation by experts can be extremely slow, and segmenting or tracking objects can become extremely tedious and, ultimately, costly, especially with the large data sets necessary to draw conclusions. Annotations by untrained people may cut down on the cost, but also the quality of the annotations. The organization requesting the annotations would also have to spend time and manpower checking through the submissions to find the accurate ones. As a result, we are making a game out of segmenting and tracking. A game would give the crowd motivation to annotate without any other form of compensation and would also give people incentive to do well on their annotations in order to score higher. A successful game would eliminate many of the costs while maintaining a high level of accuracy. As of now, I have done research into gamification projects and what makes a good game for crowdsourcing purposes. I have also designed a few aspects of the game that would make annotating the pictures and clips entertaining.