

Team Name: sdmay24-08

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Report Period: Sept 25-Oct 8

### **Summary of Progress in this Period**

- Verified reward allocation and collection system.
  - Improved complete coverage algorithm to not waste time searching outside of boundary.
  - World simulation padding is now calculated from world dimensions.
  - Drone movement speed (step size) calculated based on desired overlap percentage of images.
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### **Pending Issues**

- Expand complete coverage algorithm to non-rectangle shapes and maintain optimal pathing.
  - Make sure code conforms to OpenAI Gymnasium API. This is important so we can easily implement RL algorithms in the future.
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### **Plans for Upcoming Reporting Period**

- Start researching RL algorithms.
  - Read OpenAI Gymnasium API documentation and make sure code conforms.
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