

Allsky Camera Network for Detecting Bolides

Tyler Turner, Vincent Quintero, Jean-Pierre Derbes, Charles Derbes

Faculty Advisor: Dr. Csaba Palotai, Dept. of Aerospace, Physics and Space Sciences,
Florida Institute of Technology

Goal

Replace the current software stack with Heimdall, a system that can capture, analyze, and showcase potential bolides captured by nodes distributed across the United States.

Motivation

To improve the research experience of Dr. Palotai and his team by providing a more robust and friendly user experience for researchers and volunteers involved in the project.

To work on a complex and interesting project that would provide value.

Features

- Reduced Cost Volunteers no longer have to mail back malfunctioning nodes.
- Improved Stability Nodes no longer crash when modifying their configs.
- Improved UX Nodes can be remotely managed via a central web interface.
- Enhanced Modularity Developers can easily add new features as needed.
- Integrated Machine Learning Automatically classifies bolides when captured.

Design











