# Allsky Camera Network for Detecting Bolides

Tyler Turner Vincent Quintero Jean-Pierre Derbes Charles Derbes Dr. Csaba Palotai

Task Matrix (Milestone 4)

Task	Completio n	To Do	Tyler	Vincent	Jean-Pierre	Charles
Implement UI	50%	Total integration of node controls Total database integration Adjustments req'd by researchers	10%	60%	0%	30%
Polish Server	99%	Modify some endpoints and move some services due to event detection moving to the node.	50%	20%	30%	0%
Polish Client	99%	Identify every service that requires an internet connection and come up with a way to intelligently run the node in offline mode.	30%	20%	20%	30%
Client hardware interaction	50%	Return hardware status when status endpoint is hit, camera calibration	30%	10%	50%	10%
Create setup process for node	100%	Done	20%	0%	10%	70%

· · · · ·

### Task Discussion (Milestone 4)

Implement UI - Remote configuration of nodes, framework and layout

Polish Server - State configs, weather data, new endpoints

Polish Client - Event detection moved to nodes, IoT and video code changed

Client hardware interaction - Basic sensor testing, GPS integration

Create setup process for node - Hardware testing of individual components, quality assurance

## **Frontend Demo**

http://demo.tyler-turner.com/

### Contribution

Tyler - Backend-frontend interaction, added code quality tools, openweathermap api to get weather for nodes

Vincent - UI conception and development, interviewing researchers, early integration of database to frontend

Jean-Pierre - Camera video code (event recording and whole night video recording), state management (config)

Charles - Node connectivity and design, IoT update, management of the node's hotspot (1 network interface)

### Task Matrix (Milestone 5)

Task	Tyler	Vincent	Jean-Pierre	Charles
Client Hardware Interaction	50%	0%	25%	25%
Orbit, trajectory, velocity, mass (of bolide)	0%	0%	20%	80%
Client connectivity logic	10%	0%	20%	70%
Poster and e-book	25%	25%	25%	25%
Finish UI	20%	80%	0%	0%
Server and client testing	40%	30%	20%	10%
Video capturing and storage, move event detection to node	0%	0%	80%	20%

• \* • \*

· · ·

· · · · · ·

• •

### Task Discussion (Milestone 5)

Client hardware interaction - Camera calibration, email alerts

Orbit, trajectory, velocity, mass - Calculate and display Client connectivity logic - Queuing requests, broadcasting hotspot Poster and e-book - Interview researchers, basic evaluation, create both

T OSICI AND C-DOOK - INCLINEW ICSCALCINCIS, DASIC CVARATION, CICALC DO

Finish UI - Integrate with actual data, integrate with the database

Server and client testing - Unit tests and integration tests, test backup

Video capturing, event detection to node - Move event detection to node

# Thanks!

•