Project
PANOPTES

Fun With DSLR Cameras

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PANOPTES

- PANOPTES is a low cost robotic observatory which uses commercial off the shelf (COTS) technology.
- Anyone can build a PANOPTES unit. You can discover exoplanets!

PANOPTES GOALS

- Blend of research and outreach/citizen science.

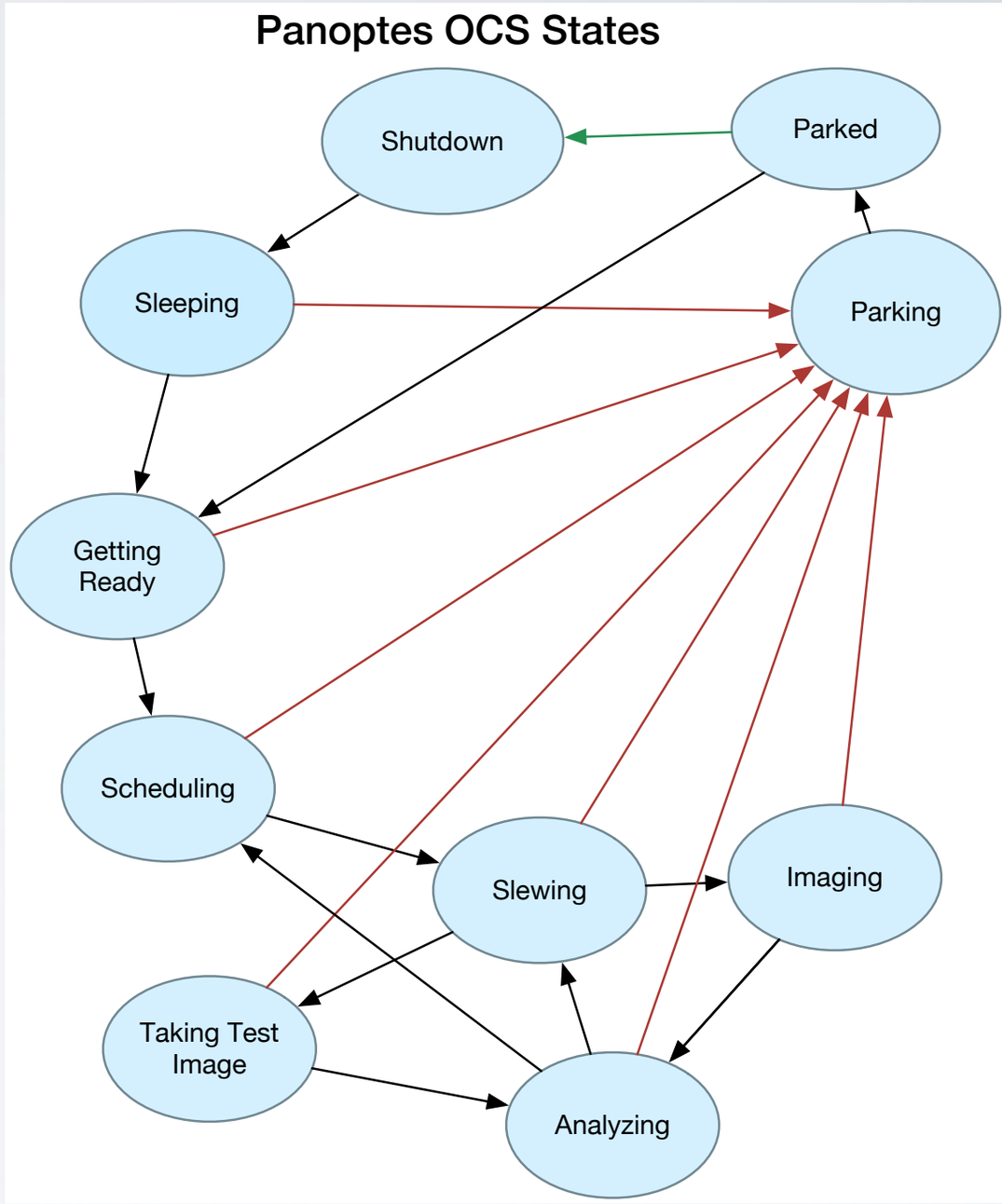
- Research: Establish a world wide network of automated cameras to monitor a large fraction of the sky to detect exoplanet transits.

- Outreach: Enable citizen scientists and schools to participate in all aspects of the science, from data collection to data analysis.

- PANOPTES can potentially support other science (variable stars, supernovae, asteroids, etc.). We want users to come up with new projects.

SOFTWARE: POCS

- PANOPTES Observatory Control System (POCS)
- State machine
- Written in python
- Uses community supported code (e.g. astropy)
- open source: https://github.com/panoptes/POCS



USE CASE

- Currently controls multiple Canon DSLRs

- Ideal for sky / cloud monitor
  - e.g. CFHT sky probe, Gemini cloud cams, Keck cosmic cam
  - monitor extinction / cloud cover
  - All sky extinction monitor?

For example:
http://www.fallingstar.com/weather/mlo/