

Bethany Baldwin-Pulcini

bethanypulcini@gmail.com | 530.722.8672
Austin, TX

EDUCATION

UNIVERSITY OF CALIFORNIA, DAVIS BS IN PHYSICS

Concentration Astrophysics
Dec 2015 | Davis, CA

SKILLS

Technical

- Python
- Bash
- Linux
- Git

Other

- Project Management
- AGI STK Level 1 Certified

INTERESTS

Space Policy

- Delegate to the Space Generation Forum 2.0 in support of UNISPACE+50
- Provided recommendations to the United Nations Office of Outer Space Affairs

STEM Outreach

- Public speaker for panels, classrooms, and STEM outreach events

EXPERIENCE

EMERGENT SPACE TECHNOLOGIES | SOFTWARE ENGINEER

April 2019 - Present | Austin, TX

- Developing command-line tool to manage applications for deployments of GSFC's Core Flight Software, to facilitate rapid prototyping for multi-satellite missions

PLANET LABS, INC | SPACE SYSTEMS ENGINEER

April 2017 - April 2019 | San Francisco Bay Area, CA

Ensured the continued health and safety and 24/7 operations of Planet's fleet of SkySat satellites

- Derived requirements for nominal and contingency spacecraft procedures and ensured successful execution on-orbit.
- Leveraged troubleshooting skills to investigate and respond to satellite anomalies.
- Led acceptance testing and on-orbit release for 6 releases of onboard software, which increased imaging capacity and reduced downtime of the SkySat fleet.
- Managed a cross-functional team to relocate, install, and verify functionality of SkySat test hardware and ground support equipment.
- Architected and developed software to automate spacecraft commanding and anomaly recovery, projected to save the operations team more than 20 person-hours/week

TERRA BELLA (GOOGLE) | SATELLITE CONTROLLER

April 2016 - April 2017 | Mountain View, CA

- Supported 24/7 on-orbit operations for Terra Bella's fleet of seven satellites, involving anomaly response, executing on-orbit activities for multiple engineering teams, and supporting commissioning activities.
- Developed a Python script to automate RFI avoidance with NASA satellites to support a push towards automating daily and weekly procedures.
- Acquired by Planet Labs, Inc.

UC DAVIS NUCLEAR PHYSICS GROUP | UNDERGRADUATE

RESEARCH EXPERIENCE (REU)

Summer 2014 | Davis, CA

- Used C++ and the data analysis framework ROOT from CERN to generate simulations to model heavy ion collisions.
- Analyzed simulated collisions for energy distribution, particle multiplicity, and cross-sectional area of collision.

PUBLICATIONS

Henely, S., **Baldwin-Pulcini, B.**, Smith, K. (2019) "Turning Off the Lights: Automating SkySat Mission Operations." 33rd Annual AIAA/USU Conference on Small Satellites.