

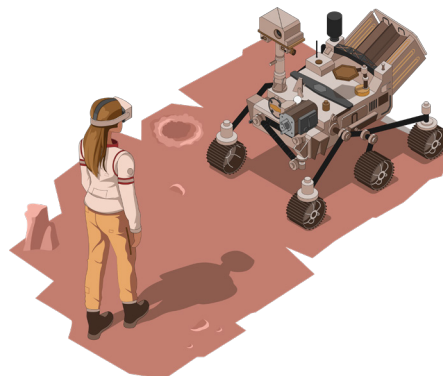
JACQUELINE RYAN

Ground Software Developer

✉ jacquiepi@protonmail.com

📍 Los Angeles, CA

📞 [Please email to request]



Skills

Software Engineering

- Proficient (7+ years): Python, C / C++
- Learner (1-2 years): C#, JavaScript
- Qt GUI development
- Jenkins test infrastructure
- AWS-based data pipelines
- Apache Airflow

Product Management

- Jama requirements tool
- IBM DOORS requirements

Embedded Systems

- Yocto Linux
- VxWorks

Imaging Science

- Embedded Camera Calibration (Color & Geometric Cal)
- Stereogrammetry
- Custom Photogrammetry Pipelines

Spacecraft Operations

- Landed & orbital missions
- Anomaly investigation

Education

New York University

TANDON SCHOOL OF ENGINEERING

BS Electrical Engineering, Dec. 2016

Publications

To view my publications on IEEE Xplore, please follow the QR code or hyperlink below:

<https://ieeexplore.ieee.org/author/37085867832>



Work Experience

NASA Jet Propulsion Laboratory | 9 years, 2015 – Present

DATA VISUALIZATION DEVELOPER

- Mars Rover Engineering Camera Software Team Lead
- EMIT Ground Systems Engineering Team Lead
- Mars Sample Return Lander Camera Systems Engineer
- VR / AR Application Prototyper

Highlight Projects

Mars 2020 Perseverance Rover Engineering Camera Team

ENGINEERING CAMERA SOFTWARE DEVELOPMENT TEAM LEAD

- Managed team of four engineers to create graphical tool for commanding spacecraft cameras to achieve key mission objectives
- Implemented AWS data pipeline efficiency improvement that resulted in \$750k/yr reduction in OpEx and 40% reduced delivery time for key products

LiveView: Real-Time Data Visualization for Imaging Spectrometers

LEAD DEVELOPER, GROUND SYSTEMS ENGINEERING TEAM LEAD

- Developed software for real-time diagnostics of prototype camera sensors that aided in delivery of over 10 instruments
- Capable of running on FPGA-based SoC processor for field ops

“Exploring Mars” AR app for Apple Vision Pro

PRODUCT MANAGER / PROTOTYPER

- Worked with team of six engineers and designers to ship a launch app for the Apple Vision Pro on an accelerated timeline
- App received over 20k downloads in first month and featured in over 5 Youtube videos by creators with over 100k subscribers



Mars Sample Return Lander Embedded Cameras

SYSTEMS ENGINEER, DATA PIPELINE PRODUCT MANAGER

- Designed a testbed data pipeline with Apache Airflow for processing images from a spacecraft that will return material from Mars back to Earth
- Gathered requirements for next generation of space-borne cameras