runphilrun.github.io
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PHILIP J. LINDEN

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Professional Summary

I am a recent graduate who is passionate about the design and analysis of aviation and space systems, including but not limited to satellites, human spaceflight, spacecraft and aircraft structures, propulsion, mechanisms, imaging, and controls. I am relentlessly curious, a strong visionary, and optomistic about the future of technology and humankind.

Degree

Rochester Institute of Technology, *Rochester, NY* Aug 2012 – May 2017

Bachelor of Science in Mechanical Engineering – Aerospace Option **GPA:** 3.5

Master of Engineering in Mechanical Engineering (Dual Degree) **GPA:** 3.3

Engineering Experience

Lockheed Martin Space, *Sunnyvale, CA* June 2017–Present

Electro-Optical Engineer, Optical Payload Center of Excellence

- Planned and conducted experiments and analysis to characterize focal plane arrays.
- Led a software team through critical development milestones for a Matlab engineering tool.
- Led a team to win a company-wide machine learning hackathon with Python and sci-kit learn.

SpaceX, *Hawthorne, CA* June–August 2016

Vehicle Engineering Intern, Capsule Structures

RIT Center for Detectors, *Rochester, NY* March–May 2016

Lab Assistant, Mechanical Engineer

SpaceX, *Hawthorne, CA* January–July 2015

Vehicle Engineering Intern, Capsule Reusability

GE Aviation, *Cincinnati, OH* January–May 2014

Engineering Co-op, Ultrasonic Non-Destructive Test Lab

Projects

Cosmic Dawn Intensity Mapper System-Level Design, *github.com/runphilrun/CDIM-design*

Contributed to a proposal for a Probe Class (~$850M) NASA mission for a 1.5 meter space telescope intended to observe near-infrared light from the early universe.

- Compiled financial, mass, and power budgets for the optics, instruments, cryocooler & spacecraft.
- Defined system-level design, generated representative CAD models and figures for the entire spacecraft.

1 kW Arcjet Thruster, *github.com/RIT-Space-Exploration/msd-P17101*

Developed the concept, system-level design, and nozzle design for a small scale arcjet thruster demonstration. Worked in a multidisciplinary team of mechanical and electrical engineers.

- Responsible for communication between the team and the customer (RIT Space Exploration).
- Designed and performed CFD analysis on the thruster nozzle.