# **Benjamin Powell Shapiro**

On a mission to engineer a sustainable future in space and here on Earth. Experience on international projects across academia, government, and National Security Space, bridging gaps between technical and non-technical players and forming connections across domains. Seeking to apply strong analytical background and interdisciplinary knowledge to make a meaningful contribution to innovative ventures in aerospace and climate. **EDUCATION** 

# **International Space University**, Master's of Space Studies: Strasbourg, France

Sep 2022 - Dec 2023

New Space & Entrepreneurship · Space Negotiation & Business Strategy · Space Policy, Economics, & Law Space Engineering & Applications • Human Performance in Space • Commercial Space Stations Team Project

#### American Astronautical Society Scholar

#### Thesis Project: EO Unlocked – Metadata Search Engine for Earth Observation

- Developed prototype application integrating spacecraft tracking data with inferences about historical and predicted future visual footprints from data-mined sensor specifications.
- Designed interface to a searchable spatial database of all potential images for hundreds of EO spacecraft.

#### Cassini Hackathon:

- Formed and led team using space data to create an end-to-end ocean energy project financing solution. Certificate (Interactive Space Program, ISP20 - Ilan Ramon Scholar):
  - Produced recommendations for space to combat pandemics, later presented at the United Nations.

# **Cornell University**, B.A. Economics, Minor: Astronomy, Ithaca, NY

Econometrics · Statistics · Space Science, Policy, & Exploration · Astrophysics · Energy Economics · Game Theory Teaching Assistant (CS4852): Networks II, Market Design

#### **WORK EXPERIENCE**

### The Aerospace Corporation, El Segundo, CA

Member of the Technical Staff: Space and Ground System Acquisitions

Jan 2024 - Present

- Provide objective and non-partisan technical support to various government agencies across the systems engineering lifecycle from concept to disposal.
- Building models and tools to enhance modeling and simulation of space systems' cost and schedule.
- Compare alternatives, analyze business viability, and forecast execution risk in large government acquisitions.

# Starburst Aerospace Accelerator, Tel Aviv, Israel

Graduate Intern/Entrepreneur-in-Residence

May 2023 - Aug 2023

- Developed MVP of full-stack automated tech scouting and collective intelligence platform dubbed "InnoMatch", employing data mining, semantic search, and large language models.
- Delivered market analyses for portfolio startups in earthquake prediction and hyperspectral imaging.

## The Aerospace Corporation, El Segundo, CA

Graduate Intern: Cost Estimation, Economic & Market Analysis, Tech Forecasting

Jun 2022 - Aug 2022

- Analyzed NewSpace merger/acquisition of strategic importance to US Government customers.
- Led Cost, Tech Forecasting, and UAV roles for "Project Wildfire", a concurrent design and engineering exercise in Aerospace's Concept Design Center, to enhance GEOINT capabilities to detect, monitor, and predict wildfires. Authored paper estimating Model-Based Systems Engineering costs within major aerospace system acquisitions.

### National Aeronautics and Space Administration (NASA), Washington, D.C.

Intern: Office of the Chief Technologist (OCT), Strategic Integration Team

Jun 2021 - Aug 2021

- Built app to simplify NASA's vast technology development ecosystem, connecting innovators with opportunities.
- Supported pilot of "Easy-to-Read-Market-Analysis", delivering standardized studies to NASA decision-makers.

#### Cornell Alpha CubeSat Mission (Space Systems Design Studio), Ithaca, NY

Communications Lead, Software Developer

Nov 2019 - Dec 2021

Directed team of communicators and developers in a campaign to select the first holograms launched into space.

#### PROFESSIONAL DEVELOPMENT COURSEWORK, TECHNICAL SKILLS & INTERESTS

Private Equity and VC (Bocconi) • The Finance of Climate Change (EDHEC) • Financial Markets (Yale)

Excel · MS Project · Python · ArcGis · Google Earth Engine · SQL · HTML · CSS · JavaScript · React.js · Flask

Chess (Virgin Islands Champion) · Cooking · Cycling · Running · Spanish: Professional Proficiency