John Landreneau

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SUMMARY OF QUALIFICATIONS

- Combines engineering expertise with program management experience supporting mission-critical systems.
- Proven ability to translate complex technical requirements into executable plans.
- Advocates for engineering excellence, continuous learning, and proactive risk reduction.
- Experienced in government and industry management practices applied to complex technical projects
- Approaches challenges with forward-thinking and practical solutions

INDUSTRY PROFESSIONAL EXPERIENCE

ispace-US

(2025-Present)

NASA CLPS CP-12 - ispace, inc. Mission 3

Senior Technical Program Manager - Mission Program Lead

- **Leads program execution of NASA's CP-12 Lunar Mission**, ensuring alignment with technical, schedule, and cost objectives.
- **Manages a $100M+ program and mission budget**, developing and implementing efficient labor and material tracking systems to improve cost visibility.
- **Oversees workforce planning and execution for 75+ multidisciplinary engineers** across mechanical, thermal, avionics, software, propulsion, flight dynamics, and GNC disciplines.
- **Serves as the primary point of contact** between Draper (prime), ispace inc., and ispace-LUX, ensuring cohesive technical and programmatic communication across domestic and international teams.
- **Institutionalized NASA program management practices** through systems engineering leadership and agile implementation:
  - o Standardized NPR 7120.5, 7120.8, and 7123.1D processes across the organization.
  - o Established a formal Risk Management framework informed by NASA/SP-20240014019.
  - o Authored the ispace-US CP-12 program management plan
- **Negotiated and brokered new contracts** to enable strategic procurement and test campaigns supporting mission milestones.

Astrobotic

(2022-2025)

Lunar robotic mobility and infrastructure services

Senior Technical Project Manager

- **Accountable for budget and schedule** of multiple high profile advanced technical projects.
- **Managed $20M+** of mobility and power systems programs; implemented data-driven tracking controls.
- **Lead proposal efforts** for future lunar infrastructure valued at over $80M.
- **Maintained consistent engagement** with NASA centers including KSC, JSC, GRC, and LaRC.
- **Institutionalized NASA management practices** informed by NPR 7120.5 and 7120.8.
- **Applied nuclear expertise** to guide strategic planning and roadmapping for advanced lunar power concepts.
- **Brokered the first payload sale** for a mobility service.

Responsible Projects

- Griffin Mission 1 (NASA Commercial Lunar Payload Services) mechanical and fluid systems program management.
- CubeRover Mission 1 (NASA Game Changing Development)
- Vertical Solar Array Technology (VSAT) (NASA Game Changing Development)
- JETSON (AFRL) Lunar NRHO fission power module
- *CubeRover Tipping Point, NeuRover (4U CubeRover), BUILD* (in-situ lunar resource utilization)

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SKILLS

Software
Jira, Confluence, JAMA, Microsoft Office Suite, Microsoft Project, Photoshop, Linux, Ansys, Patran, Tecplot

Analysis
GRAD, MCNP, Patran

Coding
Python, Visual Basic, Processing

CAD
Solidworks, Autodesk Fusion 360, Blender, Teamcenter

Rapid Prototyping
3D printing, Arduino, mold making, vacuum casting, 3D scanning

Manufacturing
Welding (TIG, MIG), lathe, mill

PAST PROFESSIONAL EXPERIENCE

Motional (2020-2022)

Autonomous vehicle joint venture with Hyundai Motor Group

Systems Integration Team (2021-2022)

Sensor Cleaning Engineering Lead, Senior Engineer

- **Responsible for technical leadership/direction** and resource allocation of sensor cleaning components and vehicles.
- **Set engineering targets and expectations** for the engineering team to meet program goals and obligations.
- **Managed milestones** and communicated regularly with internal and international leadership.
- **Validated and tested** next generation sensor cleaning components for LiDAR and camera systems.
- **Coordinated integration** of sensor cleaning system between perception, safety, and remote vehicle assistance.
- **Validated and verified performance** of next generation sensor cleaning components.

Hardware/Mechanical Engineering Team (2020-2021)

Engineer III

- **Technical point of contact and project lead** for sensor cleaning components and design.
- **Performed computational fluid dynamics simulation** of component design parameters.
- **Collaborated internationally** to develop novel obstruction detection software and execute test plans.
- **Designed and procured hardware** for vehicle sensor mounts.

General Dynamics: Electric Boat (2009-2020)

Designer and manufacturer of U.S. Navy submarines

DOD Secret Clearance, CNWDI

COLUMBIA Class Reactor Compartment Bulkhead Prototype (2017-2020)

Program Lead, Engineering Specialist

- **Technical lead and project manager** of major nuclear submarine structure.
- **Ensured material delivery and procurement** with national vendor and support construction schedule.
- **Coordinated $2M facility upgrades** to support nuclear shielding construction installation.
- **Liaison for 100,000 man-hour project** between Naval Sea Systems Command and U.S. Department of Energy.
- **Managed multidisciplinary planning teams** to issue work orders to construction personnel.
- **Reduced technical review time by over 90%** with new software to support design deliverables and increased product quality.

Manufacturing Assembly Planning (2015-2017)

Senior Engineer

- **Coordinated and designed 3D manufacturing plans** that saved thousands man-hours.
- **Developed CAD conversion scripts** that eliminated monotonous design work.
- **Wrote VBA scripts and macros** to automatically populate tasks into Microsoft Project.

Radiation Analysis Section (2009–2015)

Engineer, Engineer II

- **Analyzed radiation levels** and optimized reactor compartment shield weight.
- **Mitigated risk** with construction oversight and educational programs.

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EDUCATIONAL EXPERIENCE

University of Pittsburgh (2004-2009)

B.S Mechanical Engineering, Cert. Nuclear Engineering

Swanson Center for Product Innovation (2008-2009)

Student Machinist

- **Reverse engineered** injection molds for Mine Safety Appliances.
- **Designed tooling** for specialized medical procedures supporting the University of Pittsburgh Medical Center.
- **3D printed and vacuum casted** ease of mobility device for professor with spinal injury.
- **3D scanned and rapid prototyped** for senior design projects and formula race car applications.

US Airways (2006-2008)

Co-op Engineer

- **Reviewed documentation and supported airline operations** for Boeing and Airbus fleet.

Society of Automotive Engineers - Formula Racing (2004-2009)

Team President, suspension and chassis design lead

- **Designed and fabricated** suspension kinematics, chassis spaceframe structure, and fuel system.
- **Managed annual budget** and acquired sponsorship for $30,000 vehicle.
- **Produced a competitive vehicle on a limited budget** in five international collegiate design competitions.

VOLUNTEER ACTIVITIES

COVID 3D Printed Masks Project (2020)

Provided free N95 masks to healthcare workers during 2020 pandemic

- **Coordinated a national team** of people with 3D printers to help mitigate lack of masking resources.
- **Collaborated with healthcare providers** to approve a design that was safe to use in high-risk environments.
- **Printed, assembled, and delivered 250 reusable N95 masks** to healthcare workers.

e-NABLE Community Foundation — Local Chapter President (2016-Present)

Charitable organization providing free prosthetics for people in need

- **Manufactured 3D printed mechanically actuated prosthetic limbs** for 24 people across 6 countries.
- **Designed CAD solid geometry** for transhumeral, transradial, and wrist actuated mechanical prosthetic arms and hands.
- **Collaborated internationally and domestically** to deliver custom prosthetics.

Honeybee Hive Internal Environment Sensor Project (2013)

Temperature/humidity sensor to help mitigate colony collapse

- Awarded the 2013 Eastern Apiculture Society 1st place technology award.
- Designed printed circuit board and wrote code for environment sensors.

INTERESTS AND HOBBIES

Astrophotography

- Narrowband Hubble spectrum of nebulae, globular clusters, and galaxies
- Custom designed autofocusing and dew mitigation systems

Judo

- Shodan (1st degree black belt)

NOTABLE CONTRIBUTIONS

Moonshot Museum / Smithsonian Air and Space Museum

- Designed, fabricated, assembled, and delivered CubeRover display pieces for local and national museums

U.S. Patent Application No. 18/166050 (VEHICLE SENSOR LENS HOOD)

IEEE Spectrum - How to Build a Power Grid on the Moon

- https://spectrum.ieee.org/moon-base