Gregory Lemieux, Computational Engineer

CONTACT

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SUMMARY

Astronautics professional with a broad technical backround working towards Computational Engineering degree. Excellent communicator within commercial, manufacturing and research environments; Proven ability to adapt to changing responsibilities based on evolving project requirements with a diverse skill set developed through participation in multiple stages of spacecraft design, development, and operations.

SKILLS

Scientific Programming: Matlab/Simulink, Julia, NumPy

Source Control: Git, Subversion

Documentation: Markdown, TeX, Pandoc, Documenter.jl

Productivity: VScode, Vim

Operating Systems: Linux, macOS, Windows

EDUCATION

Purdue University 2016-09 — Present

M.Sc. Interdiscplinary Engineering, GPA: 3.2

• CS50100 • MA52800 • AAE50800

• AAE56800

Stanford University 2015-06 — 2015-08

Center for Professional Development

• EE263

Santa Clara University 2014-09 — 2015-05

Open University

Linear Algebra I
Linear Algebra II

Boston University 1997-09 — 2002-05

B.Sc. Aerospace Engineering, GPA: 2.98

EXPERIENCE

Systems Engineering Specialist

2012-04 — Present

SSL

- Developing next-generation orbit simulation code for controls design and analysis.
- Responsible for the next-generation on-board flight software orbit estimation filter.
- Founding member of the Guidance, Navigation and Control Software Development Working Group.
- Produced mission analysis tools for the NASA Restore-L to help guide hardware subsystems decision-making.

Research and Development Engineer

2008-06 — 2012-04

Space Science Laboratory

- Developed science data accumulation forecasting tool to aid in planning mission critical science collection.
- Integrated DSN Service Scheduling Software into active mission operation scheduling process.
- Scheduled ARTEMIS mission supports including critical Lunar Orbit Insertion.
- Contributed to the Deep Space Network Scheduling Advisory and Mid-range Management Groups.

Opto-mechanical Engineer

2003-12 — 2006-05

Janos Technology

- Designed infrared lens assemblies for commercial, defense, and research applications.
- Represented the engineering department as a member of the company-wide Quality Control Committee seeking AS9100 compliance.

Mechanical Engineer

2001-09 — 2003-06

Center for Space Physics

 Designed and developed the vacuum-sealed opto-mechanical assembly for the main science payload for the SPIDR NASA mission proposal.

PUBLICATIONS

SSL Commercial Geosynchronous Spacecraft Orbit Raising Considerations

2016

Survey findings from all SSL launches since the 1990s.

THEMIS Mission Networks Expansion

2010

 Discussion of the integration of the Deep Space Network software and processes for the ARTEMIS mission extension.

AWARDS

Asterism Award, SSL

2015

 Peer-to-peer recognition for developing and delivering introductory training material for new orbit dynamics group employees.

Apogee Award, SSL

2013

 Received for contributions to a 2013 NASA Institute for Advanced Concepts (NIAC) proposal for a deep space communications architecture concept.

ARTEMIS Project Recognition, Space Sciences Laboratory

2010

• For contributions to the Lissajous and Lunar Orbit Phases.

VOLUNTEERING

UUCB - Social Media Team

2018-07 — Present

 Administrative member of the church Social Media Team. Responsible for training, technical support, and analytics reporting to the church Program Council.

UUCB - Safety Implimentation Team

2017-09 — Present

- Responsible for educating all church program groups on the Safety Plan requirements.
- Trained Family Ministry and Religious Education Volunteers on Emergency Evacuation procedures.