GREGORY LEMIEUX COMPUTATIONAL ENGINEER

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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 PYTHON C FORTRAN
SOURCE CONTROL	GIT SVN

EMPLOYMENT

Systems Engineering Specialist, SSL

2012-04 — Present

Dynamics and Controls Engineering, Mission Analysis and Design

- Developing next-generation orbit simulation code for future SSL mission validation and rehearsals.
- Responsible for the next-generation on-board flight software orbit estimation filter.
- Founding member of the Guidance, Navigation and Control Software Development Working Group.
- Built Julia and Jupyter-based mission analysis tools for future SSL missions.
- Mission analysis for the Restore-L program.

Research and Development Engineer, Space Science Laboratory

2008-06 — 2012-04

Flight Engineer and Mission Scheduler for the THEMIS mission and ARTEMIS extension.

- 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, Janos Technology

2003-12 — 2006-05

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, Center for Space Physics

2001-09 — 2003-06

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

EDUCATION

M.S. Interdiscplinary Engineering, Purdue University
2017-01 — Present

Part-time, customized, distance program with focus on Computational Engineering.

B.S. Aerospace Engineering, Boston University
1997-09 — 2002-05

SERVICE

Safety Implimentation Team Member, Unitarian Universalist Church of Berkeley

2017-09 — Present

The Safety Implimenation Team is responsible for educating all church groups on the Safety Plan requirements.

- Trained Family Ministry and Religious Education Volunteers on Emergency Evacuation procedures.

Social Media Team Member, Unitarian Universalist Church of Berkeley
2018-07 — Present

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

WRITING

SSL Commercial Geosynchronous Spacecraft Orbit Raising Considerations, Univelt
2016

Survey findings from all SSL launches since the 1990s.

THEMIS Mission Networks Expansion – Adding the Deep Space Network for the ARTEMIS Lunar Mission Phase, Space Ops Conferences

2010

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

RECOGNITION

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 Extension, NASA
2008

For work on lunar ARTEMIS extension.