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
Productivity: VScode, Jupyter, 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 Kalman filter.
- Add the work for TEA and also discuss the deployment into GSFC system
- Founding member of the Guidance, Navigation and Control Software Development Working Group.
- Provide more details about the above. Talk about standard recommendation.
- Produced mission analysis tools for the NASA Restore-L to help guide hardware subsystems decision-making.
- Detail this a bit more to focus on how this compares to old tools
- Figure out what to talk about with regard to Mission Planner and OD role

Research and Development Engineer 2008-06 — 2012-04
Space Science Laboratory

- Developed science data accumulation forecasting tool to aid in real-time planning for 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 to prepare for deployment of next-generation scheduling process.

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.