

# Gregory Lemieux, Computational Engineer

## CONTACT

gregory.lemieux@gmail.com | 1.510.847.6519 | <http://glemieux.github.io>

[GitHub: glemieux](#)

## SUMMARY

Astronautics professional with a broad technical background 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. [Interdisciplinary 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.