

Gregory Lemieux

Computational Engineer

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[glemieux](#) [in gregorylemieux](#)

I'm an engineer with a passion for developing scientific software applications to help solve some of the most pressing problems our world faces. My particular interest lies in applied optimization problems and towards this end I am pursuing a graduate degree, part-time, with a focus on Computational Engineering. I have a broad technical background developed through work in both academic and industrial organizations, providing both research-oriented and commercially-focused products and services. As such, I am extremely comfortable communicating within a variety of environments and have a proven ability to adapt to changing responsibilities based on evolving project requirements.

SKILLS

Scientific Programming

matlab/simulink julia numpy

Source Control

git subversion

Documentation

markdown tex pandoc

Productivity

vscode jupyter vim

Operating Systems

linux macos windows

WORK EXPERIENCE

(4)

Systems Engineering Specialist at [SSL](#) **April 2012- Current**
<http://sslmlda.com>

- Developing next-generation orbit simulation code for controls design and Vehicle Hardware Lab usage.
- Responsible for the next-generation on-board flight software orbit estimation Kalman filter.
- Implementing Matlab/Simulink autocode generation to help streamline flight software build efforts
- TEA code discussion
- Package management code build discussion
- 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
- Also flesh out star tracker location/orientation optimization against mission requirements
- Figure out what to talk about with regard to Mission Planner and OD role

Research and Development Engineer at [Space Science Laboratory](#) **June 2008- April 2012**
<http://www.ssl.berkeley.edu/>

- 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 at [Janos Technology](#) **December 2003- May 2006**
<http://www.janostech.com/>

- 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 at [Center for Space Physics](#) **September 2001- June 2003**
<https://www.bu.edu/csp/>

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