

Peter Solfest

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<https://github.com/solter>

Summary

Developer of scientific software with a strong background in applied and computational mathematics, and a solid understanding of physics. Experienced at developing software and algorithms to model space and terrestrial weather and its impacts on electromagnetic wave propagation.

Professional Experience

- **Mathematician** Northrop Grumman
SWAFS, Weather and Space Impacts Research and Development Center Feb 2017 – present
 - Primary Responsibilities: modernize software infrastructure, develop/improve software processes, develop innovative new applications to demonstrate space weather impacts, mathematical validation of algorithms
- **Engineering Scientist Associate** Applied Research Laboratories, UT
Space and Geophysics Laboratory Oct 2015 – Jan 2017
 - Major Projects: data assimilating ionospheric models, web services for supplying models
- **Research Assistant** University of Minnesota
Dept. of Computer Science July 2014 – Mar 2015
 - Advisor: Dr. Yousef Saad
 - Responsibilities: software development, prepare progress reports
- **Calculus Instructor** Michigan Tech Dept. of Mathematics
Calculus 1 and 2 Jan 2013 – June 2014 (4 semesters)
 - Responsibilities: Lecture, Grade, lead study sessions, write exams
 - Calc 1 (Spring 2013 - Spring 2014), Calc 2 (Summer 2014)

Professional Certifications

- **Security+** CompTIA
Application, network, and device security Feb 2018 – Feb 2021

Education

- **Michigan Technological University** Houghton, MI
M.S. in Applied Mathematics; GPA: 4.00 Aug 2012 – June 2014
 - Advisor: Dr. Jiguang Sun
- **Michigan Technological University** Houghton, MI
B.S. in Physics and Applied/Computational Mathematics; GPA: 3.94 Aug 2008 – Apr 2012
 - Graduated Summa Cum Laude

Software Skills

- **Software Practices:** (automated) unit testing, cross-language development, DevOps
- **Software Tools:** git, Linux, JIRA, L^AT_EX, Mathematica, MATLAB, SharePoint
- **Programming Languages:** Python, Java, Fortran (Modern and 77), BASH, C, C++, SQL

Achievements

- **Outstanding Teaching Award** Michigan Tech Dept. of Mathematics
Graduate Level 2014
- **Co-Recipient of Ian W. Shepherd award** Michigan Tech Dept. of Physics
"presented each year to the most outstanding physics graduate(s)" 2012
- **Departmental Scholar** Michigan Tech Dept. of Physics
2011