Peter Solfest

Northrop Grumman Corporation, 3200 Samson Way, Bellevue, NE 68123

peter.solfest@ngc.com (402) 293-3989 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

Northrop Grumman Mathematician

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

July 2014 - Mar 2015

Dept. of Computer Science

- Advisor: Dr. Yousef Saad

- Responsibilities: software development, prepare progress reports

Calculus Instructor

Michigan Tech Dept. of Mathematics Jan 2013 - June 2014 (4 semesters)

Calculus 1 and 2 - 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, LATEX, Mathematica, MATLAB, SharePoint

• Programming Languages: Python, Java, Fortran (Modern and 77), BASH, C, C++, SQL

Achievements

Outstanding Teaching Award

Michigan Tech Dept. of Mathematics

2014

Co-Recipient of Ian W. Shepherd award

Michigan Tech Dept. of Physics

"presented each year to the most outstanding physics graduate(s)"

Departmental Scholar

Graduate Level

Michigan Tech Dept. of Physics

2011