Peter Solfest

pmsolfest@gmail.com
20 S. 41st St, Apt. 58, Council Bluffs, IA 51501
phone: (651) 325-8903

Summary

Developer of scientific software with a strong background in applied and computational mathematics, and a solid understanding of physics. Experience developing software and algorithms to model space weather and its affects on terrestrial communication. Searching for a position which leverages my mathematical and scientific background to develop cutting-edge scientific software.

Work Experience

- **Software Engineer/Mathematician** — Northrop Grumman
  SWAFS — *Feb. 2017 – present*
  - Primary Responsibilities: modernize software infrastructure, improve software practices, space weather algorithm analysis
- **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)
- **Lab TA** — Michigan Tech
  Introductory Mechanics, Electronics, Mathematica — *Aug 2009 – Apr. 2012*
  - Responsibilities: grade labs; lead lab sections; assist students with Mathematica
  - Mathlab (Aug 2009 - Apr 2011), Mechanics (Aug 2010 - Dec 2011), Electronics (Jan 2012 - May 2012)

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
- **Software Tools:** git, mercurial, Linux, Maven, JIRA, vim, LaTeX, Mathematica, MATLAB
- **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