Peter Solfest

peter.solfest@ngc.com

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

(651) 325-8903

Summary

I develop and engineer software solutions and models using state-of-the-art techniques and technologies. I am especially interested in positions that leverage my applied/computational mathematics and physics background to solve problems for customers in the space domain.

Professional Experience

- **Mathematician** — Northrop Grumman
  SWAFS, Weather and Space Impacts Research and Development Center — *Feb 2017 – present*
  - Roles: SWAFS Tech Lead, Research Assistant, SWAFS Software Developer

- **Engineering Scientist Associate** — Applied Research Laboratories, UT
  Space and Geophysics Laboratory — *Oct 2015 – Jan 2017*

- **Research Assistant** — University of Minnesota
  Dept. of Computer Science — *July 2014 – Mar 2015*

- **Calculus Instructor** — Michigan Tech Dept. of Mathematics
  Calculus 1 and 2 — *Jan 2013 – June 2014 (4 semesters)*

- **Lunar and Planetary Space Academy** — NASA - Goddard, MD
  Instrumentation development for space based Gamma Ray Spectroscopy — *Summer 2011*

Professional Certifications

- **Caltech DevOps Post Graduate Program Certificate** — Caltech CTME
  cloud-native development and agile operations — *Ongoing (Nov 2020 - May 2021)*

- **CSSLP (Member ID: 788005)** — $(ISC)^2$
  secure software throughout development lifecycle — *Oct 2020 – Sep 2023*

- **Model-Based Systems Engineering** — Caltech CTME
  SysML training and model creation — *2019*

- **System Engineering Fundamentals** — Caltech CTME
  Practical methods and tools for system engineering — *2019*

- **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*

- **Michigan Technological University** — Houghton, MI
  B.S. in Physics and Applied/Computational Mathematics; GPA:3.94 — *Aug 2008 – Apr 2012*

Skills

- **Practices:** Agile methodologies, multi-language development, DevSecOps, Software Modeling

- **Tools:** Fortify, GitHub, git, Jenkins, JIRA, LaTeX, Linux, Make, MATLAB, Maven, SharePoint

- **Languages:** BASH, C, C++, Fortran (Modern and 77), Java, JavaScript, Python, SysML, SQL

Achievements

- **NG IP trade secret awards** — MS IP Committee
  3 related to space and weather effects on communications — *2018-2019*

- **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*