Peter M. Solfest 7608 Peltier Lake Drive Lino Lakes, MN 55038 phone: (651) 325-8903

email: pmsolfest@gmail.com

Mon 4<sup>th</sup> May, 2015

To whom it may concern,

I have recently graduated with a master's degree from Michigan Tech in applied mathematics after having completed a B.S. in physics and mathematics. Upon achieving this, I entered a Ph.D. program at the University of MN, but have since decided that this degree program did not fit my long term interests and have decided to employ my skills rather than continue to build them. Using Michigan Tech's career services I was alerted to your opening in the position of a research engineer.

I am interested in this position because I could contribute utilizing my entire educational background. Numerical methods have been one of my primary interest in my studies as a graduate, which would be leveraged to contribute to the development and usage of effecient software in a variety of languages (especially C, python, and matlab). This has also provided the experience of writing technical reports allowing me to communicate these methods to a technical audience. Teaching throughout my education has honed these communication skills for broader audiences with less of a technical background. Furthermore, my undergraduate degree in physics has given me a solid understanding of the physical processes which lie at the root of CFD software.

Thus I believe my educational background in both mathematics and physics would allow me to approach this position with a not just the technical skills required but a holistic approach, while my teaching and educational experiences would provide effective communications to all audiences. Thank you for you consideration and time, and hope to hear from you soon.

Sincerly,

Peter M. Solfest

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# Peter Solfest

7608 Peltier Lake Drive, Lino Lakes, MN 55038

## Summary

Recent graduate with a strong background in applied and computational mathematics, and a solid understanding of physics. Pursuing a career which leverages these skills to develop and improve mathematical models and software utilizing numeric techniques.

## Education

University of Minnesota - Twin Cities

Ph.D. Scientific Computation: GPA: 4.00 (no longer pursuing)

Advisor: Dr. Yousef Saad

Michigan Technological University

M.S. Applied Mathematics; GPA: 4.00

- Advisor: Dr. Jiguang Sun

Michigan Technological University

B.S. in Physics and Applied/Computational Mathematics; GPA:3.94

- Graduated Summa Cum Laude

Minneapolis, MN

Aug. 2014 - Mar. 2015

Houghton, MI

pmsolfest@gmail.com

phone: (651) 325-8903

Aug. 2012 - June 2014

Houghton, MI Aug. 2008 - Apr. 2012

Research Experience

Senior Research (BS degree)

Computational analysis of spectra arising from Mo doped Tungstenite

- Advisor: Dr. John Jaszczak

Lunar and Planetary Space Academy

Instrumentation development for space based Gamma Ray Spectroscopy

- Mentor: Dr. Ann Parsons

Yap Research Group

Boron Nitride Nanotube (BNNT) synthesis and application

Houghton, MI

2011 - 2012

NASA - Goddard, MD

Summer 2011

Michigan Tech Summer 2010

Work Experience

Calculus Instructor

Calculus 1 and 2

- Responsibilities: Lecture, Grade, lead study sessions, write exams

- Calc 1 (Spring 2013 - Spring 2014), Calc 2 (Summer 2014)

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

Michigan Tech

Aug 2009 - Apr. 2012

Introductory Mechanics, Electronics, Mathematica

- 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)

#### Skills

• Software: GNU Octave, Linux, LATEX, Mathematica, git, BASH

• Programming Languages: MATLAB, C, Java, Python

## Achievements

**Outstanding Teaching Award** 

Graduate Level

Co-Recipient of Ian W. Shepherd award

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

Departmental Scholar

Michigan Tech Dept. of Mathematics 2014

Michigan Tech Dept. of Pysics

2012

Michigan Tech Dept. of Pysics

2011

### Extra Curricular Activities

#### **Broomball**

Player (2009 - 2015) and Team Captain (2011-2014)

**SPS** Member

Public outreach explaining physics concepts to elementary students