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

Tue 14<sup>th</sup> Jul, 2015

To whom it may concern,

I have recently graduated with a master's degree from Michigan Tech in applied mathematics after completing a B.S. in physics and mathematics. I would be a great fit at spaceX given my educational background and strong personal interest in space science.

I will contribute to spaceX utilizing my entire educational background. My B.S. and M.S. in applied mathematics has provided me with extensive experience developing and implementing numerical algorithms in Matlab and C. Furthermore my B.S. in physics has provided me a broad background in the physics underlying many of the useful applications for the mathematical models. My education and personal experience has further provided me with extensive experience working in a Linux environment and scripting jobs using BASH. Furthermore I find tackling new problems envigorating, and have participated in programming AIs in the annual BonzAI Brawl using JAVA and have created many particle simulations in my free time using Python among other projects. Beyond my technical qualifications, I have had a life long fascination with space science - following it closely as well as having had the opportunity as an intern at NASA.

My educational background in mathematics will allow me to approach this position with the technical skills required while my undergraduate in physics and personal fascination with space will provide a strong foundation for the scientific principles necessary to understand the data. Furthermore, having taught throughout my education along with compiling reports throughout my education will allow me to effectively communicate and collaborate with a wide variety of professionals. Thank you for your time and consideration, and hope to hear from you soon.

Sincerely,

Peter M. Solfest

Peter m. Solfest

# 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 while continuing to develop them.

#### Education

### Michigan Technological University

M.S. in Applied Mathematics; GPA: 4.00

Aug. 2012 - June 2014

- Advisor: Dr. Jiguang Sun

## Michigan Technological University

Houghton, MI

Houghton, MI

pmsolfest@gmail.com

phone: (651) 325-8903

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

Aug. 2008 - Apr. 2012

- Graduated Summa Cum Laude

## Research Experience

### Senior Research (BS degree)

Houghton, MI

Computational analysis of spectra arising from Mo doped Tungstenite

2011 - 2012

- Advisor: Dr. John Jaszczak

### Lunar and Planetary Space Academy

NASA - Goddard, MD

Instrumentation development for space based Gamma Ray Spectroscopy

Summer 2011

- Mentor: Dr. Ann Parsons

### Yap Research Group

Boron Nitride Nanotube (BNNT) synthesis and application

Michigan Tech Summer 2010

## Work Experience

### 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

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)

#### Skills

- Software: GNU Octave, Linux, LATEX, BASH, Mathematica, git
- Programming Languages: MATLAB, C, Python, Java

#### 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