

# Sarah A. Spitzer

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**Objective:** To seek relevant experiences to *in situ* data measurement and spaceflight hardware in space science..

**Education:** University of Michigan, College of Engineering; Ann Arbor, MI, USA

**Ph.D. in Space Sciences and Engineering** with Space Science & Engineering M.S.; Plasma Science and Teaching Certificates  
M.S. Received: December 20, 2018 Plasma Science Certificate Received: December 20, 2018

**M.S. in Electrical and Computer Engineering: Robotics**  
Received: April 28, 2016 GPA: 3.496/4.000

**B.S.E. in Computer Engineering** with Minors in Multidisciplinary Design and Near Eastern Studies  
Received: May 1, 2014; *Cum Laude* GPA: 3.403/4.000

## Honors and Awards:

- Solar Heliospheric & Interplanetary Environment (SHINE) Conference Outstanding Student Poster Award 2018
- Solar Heliospheric & Interplanetary Environment (SHINE) Conference Outstanding Student Talk Award 2017
- Michigan Institute for Plasma Science and Engineering (MIPSE) Graduate Fellowship 2016-2017
- Eta Kappa Nu; Most Outstanding Electee, Most Outstanding Active, and Fantastic Mentor WN & FA 2015
- Dean's List; University of Michigan College of Engineering WN 2010, Spring 2010, FA 2012, WN 2013
- University Honors, University of Michigan FA 2012 & WN 2013
- University of Michigan Science Learning Center Physics Study Group Leader of the Year 2011

## Technical / Scientific Publications and Presentations:

***In Situ Data... Where does it come from? A Talk on Instrumentation and Embedded Systems***  
Oral presentation. SHINE Conference 2017.

***Determining the Interstellar Wind Longitudinal Inflow Evolution Using Pickup Ions in the Helium Focusing Cone***  
Poster. SHINE Conference 2017, 2018. Michigan Geophysical Union 2018. American Geophysical Union 2017, 2018.

## Work Experience:

### ***University of Michigan, Department of Climate & Space Sciences and Engineering; Ann Arbor, MI***

Mentor for Master of Engineering students participating in independent research January 2019—Present  
Graduate Student Research Assistant in the Solar Heliospheric Research Group September 2016—Present  
Research Assistant in Prof. Renno's group, working on Mars soil wetness sensor August 2015—May 2016

### ***University of Michigan College of Engineering; Ann Arbor, MI***

Counselor and hardware expert for MiBytes robotics summer camp July 2017  
Teaching Assistant (TA) for ENGR 101, Introductory Computer Programming at U of M February 2014—May 2016

### ***Gentex Corp.; Zeeland, MI***

Intern Machine Vision Group engineer; Software and process inspection development Summer 2014, 2015

### ***ViaSat Inc.; Duluth, GA***

Intern Engineer; Software language study and LabVIEW antenna test software development Summer 2011

### ***University of Michigan Science Learning Center; Ann Arbor, MI***

General Physics One Study Group Leader; Discussion and group learning facilitator September 2010—April 2011

## Campus Involvement:

***University of Michigan CLaSP Graduate/Undergraduate Student Organization*** FA 2016—Present  
Co-President, Student Engagement Committee and DEI Committee member, Event organization and participation

***University of Michigan Archery Club*** FA 2017—Present

***Eta Kappa Nu; Honor Society of IEEE*** WN 2015—FA 2017

Girls' Chair & Mentor F15 & W16, Active status from F15, Sequoia Place Chair W15, Volunteering (over thirty hours)

***University of Michigan Solar Car Team*** FA 2011—WN 2014

World and American Solar Challenges, Driver, Navigator, Micro Electrical Embedded Systems Lead

***Performance Groups at the University of Michigan*** FA 2010—WN 2016

U of M Women's Glee Club & U of M Gilbert and Sullivan Society (including executive board and technical work)

***University of Michigan Girls in EECS*** WN 2010—WN 2016

Mentorship, volunteering, and event participation