Sydney Whilden
Curriculum vitae

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EDUCATION

2015 – 2019 **University of Georgia**
B.S. PHYSICS & ASTRONOMY
Minor: Comparative Literature
Expected graduation May 2019

WORK EXPERIENCE

MAY 2018 – PRESENT
UGA Small Satellite Research Laboratory
MOCI Mission Operations Lead

● Implement mission concept for Multiview On-board Computational Imager (MOCI)
● Assist in developing ground station for telemetry and data downlink
● Simulate orbital environment to budget power and monitor radiation exposure
● Document progress for reviews with Air Force Research Laboratory's University Nanosatellite Program

OCTOBER 2016 – MAY 2018
UGA Small Satellite Research Laboratory
Mission Simulations Manager

● Assessed link margins, target feasibility, power generation, and radiation dosage
● Compiled assessment of risk due to orbital debris and close approach

MAY 2017 – AUGUST 2017
UGA Center for Undergraduate Research Opportunity
Research Assistant

● Simulated LEO radiation environment in STK
● Wrote research-based radiation risk report
● Presented findings for review with UNP and in a conference setting

OUTREACH & EXTRACURRICULARS

2015 – PRESENT **UGA Women's Rugby Football Club**
Assorted community volunteer work

JUNE 2017 **SSRL Women in Technology Workshop**
Assisted 7th grade girls with programming activity

OCTOBER 2018 **Guest-teaching activity**
Led laboratory activity at Cedar Shoals High School

PUBLICATIONS & PRESENTATIONS

NOVEMBER 2018 **Towards an Integrated GPU Accelerated SoC as a Flight Computer for Small Satellites**
ACKNOWLEDGED
Accepted for 2019 publication to IEEE Xplore Library

NOVEMBER 2018 **Symposium on Space Innovations**
POSTER
Implementing a Software-Defined Radio Scheme for a CubeSat Ground Station

AUGUST 2018 **Small Satellite Conference**
Represented UGA SSRL at poster booth

APRIL 2018 **MOCI Critical Design Review**
Presented to AFRL's University Nanosatellite Program

APRIL 2018 **UGA CURO Symposium**
POSTER
Effect of Solar Beta Angle on CubeSat Mission Development

OCTOBER 2017 **Symposium on Space Innovations**
POSTER
CubeSats & Radiation Damage

GRE SCORES

VERBAL	170
QUANTITATIVE	158
ANALYTICAL WRITING	5

SOFTWARE SKILLS

PROFICIENT	STK 11, Python
INTERMEDIATE	GNURadio
BEGINNER	C, C++, PyRaf