

# Alex Hoffmann

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## EDUCATION

<b>University of Michigan</b> , Ann Arbor, MI Ph.D. Climate and Space Sciences and Engineering Plasma Sciences and Engineering Certificate	<b>Aug 2021 - Present</b>
<b>University of Iowa</b> , Iowa City, IA B.S.E. Computer Science and Engineering, GPA: 3.88 Mathematics Minor	<b>May 2021</b>

## RESEARCH EXPERIENCE

<b>Graduate Research Assistant</b> <i>Moldwin Magnetics Lab. University of Michigan</i> <ul style="list-style-type: none"><li>Research and development of signal processing algorithms for low-cost magneto-inductive magnetometers.</li></ul>	<b>May 2021 - Present</b>
<b>Research Assistant</b> <i>Miles Space Physics Group. University of Iowa</i> <ul style="list-style-type: none"><li>Design and development of telemetry system for a NASA-funded high frequency search coil/fluxgate hybrid magnetometer.</li><li>Design and synthesis of FPGA interface to ADCs &amp; C-RAM embedded on fluxgate magnetometers.</li></ul>	<b>Jan 2020 – May 2021</b>
<b>Research Assistant</b> <i>Computer Human Interaction Lab. University of Iowa</i> <ul style="list-style-type: none"><li>Developed software in C# for a wearable device to make running tracks easier to maneuver for visually impaired people.</li></ul>	<b>Aug 2019 - Dec 2019</b>

## WORK EXPERIENCE

<b>Engineering Co-op</b> Collins Aerospace. Cedar Rapids IA <ul style="list-style-type: none"><li>Full Stack design and development of server-based data analysis tool used to certify safety-critical airborne systems software in Collins' Flight Management Systems.</li><li>Server framework was built using Python, Flask, Jinja, jQuery, HTML/CSS, &amp; MySQL</li></ul>	<b>Jan 2019 - Aug 2019</b>
<b>Engineering Intern</b> Collins Aerospace. Cedar Rapids IA <ul style="list-style-type: none"><li>Implemented test scripts using Python to verify functionality of Flight Management Systems.</li><li>Debugged pilot-reported problems in the Flight Management System's user interface and developed solutions in ADA programming language.</li></ul>	<b>Jun 2018 - Aug 2018</b>

## FELLOWSHIPS & AWARDS

University of Michigan Dean's Fellowship	<b>2021 - 2022</b>
MIPSE Graduate Fellowship	<b>2021 - 2022</b>
ICRU Research Fellowship	<b>2020 - 2021</b>
Old Gold Scholarship	<b>2016 - 2020</b>
Academic Success Scholarship	<b>2016 - 2020</b>
EE Undergraduate Scholarship	<b>2017 - 2019</b>