

CONTACT INFORMATION	648 Wymount Terrace Provo, UT 84604	480-603-8723 jaronce@byu.edu
RESEARCH INTERESTS	Small Aerial Unmanned Systems, Deep Learning, Robotics, Control Systems, Computing, Algorithm Design	
EDUCATION	Brigham Young University , Provo, UT B.S., Mechanical Engineering, <i>Expected</i> : Spring 2018 <ul style="list-style-type: none"> • GPA: 3.89 • Minors: <i>Computer Science and Math</i> • Advisors: Tim McLain, Ph.D, Marc Killpack, Ph.D and John Salmon, Ph.D • Relevant Courses: <i>Deep Learning, Robotics, Control Systems, Algorithm Design & Analysis, Advanced Programming Concepts, Data Structures, Discrete Data, Dynamic Modeling, Mechatronics, Integrated Product Design</i> 	
RESEARCH EXPERIENCE	Research Assistant Multiple Agent Intelligent Coordination and Control Lab (MAGICC), Brigham Young University Supervisor: Tim McLain, Ph.D Apr 2017 - present	
	Research Assistant BYU Engineering and Systems Design Lab (BESD), Brigham Young University Supervisor: John Salmon, Ph.D Aug 2016 - present	
STUDENT COMPETITION RESEARCH	Mars Rover Student Competition Task Lead for Navigation, Brigham Young University Supervisor: Marc Killpack, Ph.D Aug 2017 - present	
	AUVSI Student Competition Image Classification Researcher, Brigham Young University Supervisor: Tim McLain, Ph.D Aug 2015 - June 2017	
PUBLICATIONS	1. La, A., Salmon, J., and Ellingson, J. “Identifying Mode Shapes of Turbo-machinery Blades using Principal Component Analysis and Support Vector Machines” 2018. Submitted to <i>IMAC-XXXVI Conference</i> .	
PAPERS IN PREPARATION	1. Ellingson, J. , Salmon, J., and La, A. “Deep Mode Shape Identification.” 2. Ellingson, G., Ellingson, J. , and McLain, T. “Deep Remote Control.”	
AWARDS	Student Awards <ul style="list-style-type: none"> • BYU Library Grant Oct 2017 • Full Tuition Scholarship Aug 2014 - Aug 2017 • Dean’s List Fall 2014 Fellowship Applications <ul style="list-style-type: none"> • National Science Foundation Graduate Research Fellowship Program 2018–2021 • National Defense Science Graduate Research Fellowship Program 2018–2022 • Department of Energy Computational Science Graduate Fellowship 2018–2022 	

SERVICE	International Tutor Training Program Certification (ITTPC)	Aug 2011 - Apr 2012
	<ul style="list-style-type: none"> • Tutor students in a variety of subjects including math, chemistry, and physics • Intensive tutoring class and tutoring hour requirements 	
	Leadership in	Aug 2015 – Aug 2010
	The American Institute of Aeronautics and Astronautics (AIAA)	
	<ul style="list-style-type: none"> • In this position, I helped other students who were interested in building, controlling, and researching aircraft. • Reached out to local elementary schools to teach them about the basics of flight and to get them interested in technology. 	
	Full Time Volunteer Representative	May 2012 – May 2014
	<ul style="list-style-type: none"> • Delivered presentations designed to improve the lifestyle of people of all classes • Planned, organized, and taught workshops on goal setting, relationship building, and leadership skills • Trained new volunteers in a daily, one-on-one setting 	
	Boy Scouts	May 2012 – May 2014
	<ul style="list-style-type: none"> • Participated in projects such as cleaning up parks, painting benches, and organizing book drives for children • Key leader in organizing a community garden • Received Eagle scout rank 	
REFERENCES	Tim McLain	
	Professor	Phone: 801-422-6537
	Mechanical Engineering Brigham Young University	E-mail: mclain@byu.edu
	Marc Killpack	
	Assistant Professor	Phone: 801-422-6342
	Mechanical Engineering Brigham Young University	E-mail: marc.killpack@byu.edu
	John Salmon	
	Assistant Professor	Phone: 801-422-7135
	Mechanical Engineering Brigham Young University	E-mail: johnsalmon@byu.edu