

# KYLE JOHNSON

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## EDUCATION

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BACHELOR OF SCIENCE    Sept 2017 To Jun 2020    B.S. in Electrical and Computer Engineering (Major GPA: 3.71/4.0)  
University of Washington (UW), Seattle, WA  
Concentration: Controls, Minor: Math

STUDY ABROAD    Aug 2018 To Sept 2018    [Aeronautics and Astronautics Design of Novel Materials and Structures](#)  
Queensland University of Technology (QUT), Brisbane, QLD

## RESEARCH

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UNDERGRAD    Mar 2018 To Present    [Research Intern](#), Lab for Engineered Materials & Structures (LEMS)  
Advisors: Hiromi Yasuda, Professor Jinkyu Yang (PI)

Project: Investigate design and fabrication techniques for the leaf-out origami structure utilizing visualization software to laser cut prototypes

Interests: Origami Robotics, Energy Efficient Systems, Machine Learning

PRESENTATIONS    Sept 2019    [Knaus C.](#), Ali S., Garcia-Stubbs D., Johnson K., Mohamud L. (2019)  
Trauma, Educational Exclusions, and Survival: Examining Global Student Experience & Resilience. *UNISA Academic Development Symposium*.

July 2019    [Johnson K.](#), Arroyos V., Yang J. (2019). Leaf-out Origami: Tailorable Fabrications and Applications. *UCLA Ronald E. McNair 2019 Proceeding*.

May 2019    [Johnson K.](#), Yasuda H., Yang J. (2019). Leaf-out Origami: A Multitransformable Structure. *UW Ronald E. McNair 2019 Proceeding*.

WORKSHOPS    Jun 2019    [Johnson K.](#), Yasuda H., Yang J. (2019). Multitransformable Origami: Dynamic Simulation and Fabrication. *UW-LAUM-ChunBook-UPenn Proceeding*.

## MENTORSHIP

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UNIVERSITY    May 2019 To Present    [Tutor](#), UW College of Engineering (COE)  
Lead engineering activities for summer programs like Early Engineering Institute and Math Academy to increase K-14 student interest in engineering

Mar 2019 To Jun 2020    [Engineering Peer Educator \(EPE\)](#), UW  
Advise, mentor, and support undeclared engineering students to help them find an engineering major by teaching the UW's GEN ST 199 curriculum

Oct 2018 To Jun 2020    [Ambassador](#), Louis Stokes Alliance for Minority Participation in STEM (LSAMP)  
Identify and engage prospective students at recruitment events and network with professional organizations for the purpose of collaboration

COMMUNITY    Aug 2018    [Teacher](#), Northwest Earth and Sciences Pipeline at UW  
Taught middle school students how to code and hardwire a multitude of different sensors and devices using an Arduino Uno board

## SKILLS

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SOFTWARE	Digital Circuits and Systems (Verilog), FPGAs (Quartas), ModelSim, Data Abstraction & Encapsulation (Java), Embedded Systems (C), VMWare, Continuous Time Linear Systems (Python), Multisim, JavaScript, XML, HTML, CSS, SSH key rotation, Finite Element Analysis (MATLAB)
TECHNOLOGY	CO <sub>2</sub> Laser Cutter (ULS Interface), Arduino Assembly, 3D Printing, Soldering, Coupon design & prototyping for tailored mechanical properties (Materials Test Frame), Vertical Force-Displacement Machine

## EMPLOYMENT

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INDUSTRY	Jun 2020 To Aug 2020	<a href="#">Control Systems Engineer</a> , Whirlpool Corporation Project: Analyze a multi-state estimator for a washing machine motor using only electrical values as a substitute to sensors. Utilize MATLAB & Simulink code to simulate experiments that implement filters like the Kalman filter
ON-CAMPUS	Mar 2018 To Aug 2019	<a href="#">Web Developer</a> , UW Student Technology Fee (STF) Project: Maintain, update, and debug the STF website while following industry coding standards as an executive member on the STF admin team

## SERVICE

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UNIVERSITY	2019	University Guide, Yakima Valley College campus visit
	2019	Panelist, UW Scholar-Donor Recognition Luncheon
	2019	<a href="#">Speaker</a> , Electrical & Computer Engineering Undergraduate Orientation
	2019	<a href="#">Volunteer</a> , For National Society of Black Engineers at Engineering Launch
	2019	<a href="#">Panelist</a> , PNW LSAMP Leadership & Training Seminar
	2019	<a href="#">Panelist</a> , UW McNair Upward Bound Workshop
	2019	<a href="#">Volunteer</a> , Future Student Visit Day
	2019	<a href="#">Volunteer</a> , UW Advising & Orientation Sessions
	2019	<a href="#">University Guide</a> , for underrepresented students in local middle and high schools interested in pursuing a college degree at UW
	2019	<a href="#">Coordinator</a> , for UW's STEM study abroad in Australia table at Engineering Discovery Days
	2019	<a href="#">Panelist</a> , UW Admitted Student Preview Day
	2019	<a href="#">Tech Support</a> , UW Women in Science and Technology Conference
	2019	<a href="#">Workshop Presenter</a> , LSAMP 3D Printing and Design
	2019	<a href="#">Workshop Presenter</a> , UW's STEM Study Abroad in Australia
COMMUNITY	2019	<a href="#">Volunteer</a> , Seattle MLK Coalition
	2018	<a href="#">Volunteer</a> , Bellingham Community Meal Program

## AWARDS

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HONORS	2020	<a href="#">National Science Foundation GREP Honorable Mention</a>
	2019	<a href="#">Ronald E. McNair Scholar</a>
	2019	<a href="#">UW Dean's List</a>
SCHOLARSHIPS	2019	<a href="#">Washington Research Foundation Scholarship</a> (\$7,500)
	2019	<a href="#">UW Electrical Engineering Scholarship</a> (\$6,000)
	2019	<a href="#">Mart Bert Endowed Scholarship</a> (\$1,000)
	2019	<a href="#">NSF Research Experiences for Undergraduates</a> (\$8,000)
	2019	<a href="#">OMA&amp;D Recognition Scholarship</a> (\$4,500)
	2019	<a href="#">Mary Gates Research Scholarship</a> (\$5,000)
	2018	<a href="#">LSAMP Research Scholarship</a> (\$1,500)
	2018	<a href="#">NSF Research Experiences for Undergraduates</a> (\$8,000)
	2018	<a href="#">OMA&amp;D Merit Scholarship</a> (\$2,000)
	2018	<a href="#">MSEP Scholarship</a> (\$2,750)
TRAVEL GRANTS	2019	<a href="#">Benjamin A. Gilman International Scholarship</a> (\$2,500)
	2018	<a href="#">Plan to Go</a> (\$2,500)
	2018	<a href="#">EOP Travel Grant</a> (\$900)
PRESS	2018	<a href="#">William E. Boeing Department of Aeronautics and Astronautics News, "A&amp;A's Australia Summer Program Helps Forge Future Directions With LSAMP"</a>