

# Wai Hnin Oo

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Department of Mechanical Engineering  
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## Education

Ph.D. Mechanical Engineering, <b>University of California, Merced</b>	2019 - Present
B.Sc. Mechanical Engineering, <b>University of California, Irvine</b>	2017 - 2019
Community College: <b>Skyline College</b> , San Bruno	2015 - 2017

## Awards and Honors

National Science Foundation, Graduate Research Fellowship Program ( <b>NSF GRFP</b> )	2020
<i>Magna Cum Laude</i> Honors, University of California, Irvine	2019
Regents Scholar, University of California, Irvine	2017 - 2019
American Association of University Women (AAUW) Scholarship, San Mateo Division	2017
Don Biederman Scholarship, Skyline College, Science, Math & Technology Department	2017

## Research Experience

**Project:** Exploring the physical limits of structural superlubricity via atomic force microscopy (AFM)  
**Technical skills:** atomic force microscopy (AFM), scanning electron microscopy (SEM), transmission electron microscopy (TEM), X-ray photoelectron spectroscopy (XPS), Gwyddion software, OriginLab software, MATLAB, Microsoft Excel  
**Lab:** [Baykara Lab](#) @ UC Merced | NanoTribology  
**Funding:** National Science Foundation, Graduate Research Fellowship Program (NSF GRFP)

## Work Experience

<b>Graduate Teaching Assistant</b> (2 semesters) <i>University of California, Merced</i> Supervised undergraduate lab sessions for <i>Circuits Theory</i> (Fall 2019) and <i>Mechanics of Materials</i> (Spring 2020)	Aug 2019 - May 2020
<b>Summer FABcamp Counselor</b> (4 months) <i>University of California, Irvine</i> Led introductory OnShape CAD and circuits laboratory activities for 6-9th grade campers	Apr 2018 - Jul 2018
<b>Engineering Intern</b> (3 months) <i>Smithsonian Institution, National Air and Space Museum</i> Restored the engines of the Goodyear Blimp Gondola under the supervision of restoration specialists	Jun 2017 - Aug 2017
<b>Supplemental Instruction Leader</b> (10 months) <i>Skyline College</i> Developed and led weekly workshops to complement historically challenging physics courses in community college	Aug 2016 - May 2017
<b>Physics/Math Peer Tutor</b> (1 year 5 months) <i>Skyline College</i> Tutored a diverse range of students at different levels, with different learning styles, and from different backgrounds in community college	Jan 2016 - May 2017

## Undergraduate Technical Projects

### Flapping Wing Micro Air Vehicle (FWMAV)

University of California, Irvine

*Mechanical Design Team Lead* (1 year)

Jun 2018 - Jun 2019

Led a team of seven members to design, fabricate, and optimize a novel FWMAV actuating mechanism

*Documenting Manager* (4 months)

Mar 2018 - Jun 2018

*Purchasing Manager* (4 months)

Mar 2018 - Jun 2018

### Physics Honors Projects

Skyline College

Poster presentations given at Skyline College Research Symposium 2016 and 2017

*Rayleigh Benard Convection*

Spring 2017

Conducted experiments to measure the onset of Rayleigh Benard Convection in corn oil

*Homemade Van de Graaff Generator*

Spring 2016

Built a three-foot Van de Graaff generator from scratch for \$60

## Other Experience

### Youth Society for Education Nonprofit Organization

*Content Creator* (4 months)

Mar 2018 - Jun 2018

*Social Media & Networking Intern* (6 months)

Sep 2017 - Feb 2018

### Phi Theta Kappa Honor Society Skyline College Chapter

*Vice President of Records* (10 months)

Aug 2016 - May 2017