

Jonas Kaufman

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EDUCATION

Harvey Mudd College, Claremont, CA
Bachelor of Science, Physics
GPA: 3.928

Expected May 2017

HONORS AND AWARDS

Barry M. Goldwater Scholarship
Jude and Eileen Laspa Fellowship in Applied Mechanics
Harvey Mudd College Dean's List (5 of 5 semesters)
Harvey Mudd College Commendation for Superior Academic Performance
National Merit Scholarship Award

Mar. 2016 - Present
Jan. 2015 - Present
May 2014 - May 2016
Jan. 2014
Aug. 2013

SKILLS

VASP, Python, Java, C++, Mathematica, MATLAB, COMSOL, Igor Pro, Unix, Microsoft Office, LaTeX

RESEARCH EXPERIENCE

Sandia National Laboratories, Harvey Mudd College
Physics-Engineering Clinic Project

Sep. 2016 - Present

- Measuring permittivity of ceramic nanoparticles in composites for capacitor applications
- Leading finite-element modeling sub-project to examine the effect of nanoparticle agglomerates

Department of Engineering, Harvey Mudd College
Laspa Fellow in Applied Mechanics

Jan. 2015 - Present

- Developing density-functional methods to model mechanical properties of compositionally complex metallic alloys
- Contributed to group's proposal for 3.3 million core-hour XSEDE award
- Trained three new research students in performing ab initio calculations

School of Materials Science and Engineering, UNSW Australia, Sydney, Australia
Materials Science Research Assistant

May - Aug. 2015, 16

- Adapted ab initio techniques for calculating stacking fault energies to disordered non-dilute alloys
- Prepared TEM samples and rolled specimens to observe deformation behavior in a novel alloy system

PUBLICATIONS

J.L. Kaufman, G.S. Pomrehn, A. Pribram-Jones, R. Mahjoub, M. Ferry, K.J. Laws, L. Bassman, "Stacking fault energies of non-dilute binary alloys using special quasirandom structures." Submitted to *Physical Review B* (2016).

J.L. Kaufman, J. Sanz, G.S. Pomrehn, A. Pribram-Jones, K.J. Laws, M. Ferry, R. Mahjoub, L. Bassman, "Generalized stacking fault energies of multicomponent alloys." Poster presentation at the Minerals, Metals and Materials Society Spring Meeting, Nashville (2016).

CAMPUS INVOLVEMENT

Academic Excellence Facilitator, Academic Excellence Program

May 2015 - Present

Lead tutoring workshops for students in Special Relativity, Mechanics and Electromagnetism courses

Bass and Treasurer, Men's Blue and White

Sep. 2013 - Present

Sing in and manage budget for a cappella group

President, Atwood Dorm

Sep. 2015 - May 2016

Represented 100+ residents as part of student senate and planned dorm bonding events

Grader, Department of Physics

Sep. 2014 - May 2015

Gave students feedback on assignments for Special Relativity and Mechanics courses

Tour Guide and Intern, Office of Admissions

Jan. 2014 - May 2015

Led weekly tours and assisted with office tasks

Orientation Sponsor, Dean of Students Office

Aug. - Sep. 2014

Mentored and led group of eight incoming students and organized orientation activities