Jonas Kaufman

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EDUCATION

Harvey Mudd College, Claremont, CA
Bachelor of Science, Physics — Expected May 2017
GPA: 3.928

HONORS AND AWARDS

Barry M. Goldwater Scholarship — Mar. 2016 - Present
Jude and Eileen Laspa Fellowship in Applied Mechanics — Jan. 2015 - Present
Harvey Mudd College Dean's List (5 of 5 semesters) — May 2014 - May 2016
Harvey Mudd College Commendation for Superior Academic Performance — Jan. 2014
National Merit Scholarship Award — Aug. 2013

RESEARCH EXPERIENCE

Sandia National Laboratories, Harvey Mudd College — Sep. 2016 - Present
Physics-Engineering Clinic Project
- Measuring permittivity of ceramic nanoparticles in composites for capacitor applications
- Leading finite element modeling subproject to examine the effect of nanoparticle agglomerates

Department of Engineering, Harvey Mudd College — Jan. 2015 - Present
Laspa Fellow in Applied Mechanics
- Developing density-functional methods to model mechanical properties of compositionally complex metallic alloys
- Contributed to group's proposal for 3.3 million core-hour high-performance computing award on XSEDE
- Trained three new research students in performing ab initio calculations

School of Materials Science and Engineering, UNSW Australia**,** Sydney, Australia — May - Aug. 2015, 2016
Materials Science Research Assistant
- 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." Under review, *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).

SKILLS

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

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