

Richard Sim

Driven, Motivated, Strong Chemical Engineering Student

Huntingdon Valley, PA - Email me on Indeed: [indeed.com/r/Richard-Sim/d6300083a639a00d](https://www.indeed.com/r/Richard-Sim/d6300083a639a00d)

Hard-working, accomplished college student seeking an educational field internship/experience in chemistry/chemical engineering to gain academic and real-world experience using learned education in physical applications.

I have participated in many internships and experiences, and I am looking for work that will stimulate my learning and my passion for my field of study, while being a rewarding experience that will also help me gain insight into the professional field.

WORK EXPERIENCE

Lab Assistant

PSU Chemical Engineering - University Park, PA - January 2011 to Present

Working under Robert Rioux and Ji-Woong Chang, continuing work from NASA FURP.

NASA PA Space Grant Consortium Intern

NASA PA Space Grant Consortium - University Park, PA - January 2011 to December 2011

Participated in the analysis and experimentation of multiple catalysts for the production of industrially beneficial chemicals, under the guidance of graduate and post-doctoral team of chemical engineers. Specifically hand-selected by the project head from a pool of 100+ candidates.

Research Lab Assistant

USDA – Eastern Regional Research Center (ERRC) - Wyndmoor, PA - June 2011 to August 2011

Volunteer research assistant to Mr. Joshua Gurtler, aiding in experimental lab tests and computing chemical information in the pursuit of research about antimicrobial chemical agents on tomatoes. Worked in a biosafety level 2 lab (moderately harmful pathogens) treating and colony-plating stem scars from tomatoes.

Engineer's Aide / Intern

US Navy – NAVSEA Command - Philadelphia, PA - June 2009 to August 2009

Engineer's aide for the Office of Naval Research in Philadelphia, PA through the US Navy's Science & Engineering Apprenticeship Program (SEAP) for high school students with outstanding academic achievements. 1 of 12 accepted into the program from 400 + applications.

EDUCATION

BS in Chemical Engineering - Polymer/Nanotechnology Science

Pennsylvania State University - University Park, PA

January 2010 to January 2014

High School Degree in General Education

Lower Moreland High School - Huntingdon Valley, PA

January 2006 to January 2010

SKILLS

• Laboratory experience in operation, maintenance, and research procedures using several types of gas chromatographers, isothermal titration calorimeters, and associated computer programs. • Biological laboratory experience and protocol, proper handling of chemicals and concentrations using KHP, and handling acids. • Microsoft Office Suite, particularly Excel. Video editing software (Sony Vegas), audio editing software (Goldwave, Audacity, Sony Vegas), 3D modeling software (Cinema 4D). • Music: Guitar (4 years), ukulele (1 year), piano (6 years), drums (2 years)

AWARDS

NASA PA Space Grant Consortium Grant

January 2011

Awarded a FURP (Freshman Undergraduate Research Program) research scholarship

Dean's List (College of Engineering)

May 2012

Three consecutive semesters

National College Board:

June 2009

AP Honors Scholar Selected by National College Board Spring 2011

National Merit Award (PSAT) & National Merit Scholarship Nominee Grade 11

American Heritage Federal Credit Union Scholarship

June 2010

Granted a scholarship based on essay and reference letters.

Bank of America Joe Martin Scholarship

June 2010

Granted a scholarship based on essay and reference letters.

Delaware Valley Science Council Exam Competition Participant (2009 – 2010)

June 2009

Chosen as one of 4 students from high school science classes to participate in a tri-state area testing exam competition.

Distinguished Honor Roll

June 2009

High school award granted for grades 10, 11, 12 (was awarded in 2009, 2010, 2011).