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EDUCATION

The Pennsylvania State University <i>Schreyer Honors College, The College of Engineering</i> Bachelor of Science in Biological Engineering Food and Biological Process Option Minor in Spanish Passed Fundamentals of Engineering Exam (EIT certification pending)	University Park, PA <i>Class of 2015</i> GPA: 3.92 <i>Fall 2015</i>
University of Alicante Completed a 15 credit semester of classes taught in Spanish, including a technical microbiology course with laboratory	Alicante, Spain <i>Fall 2014</i> GPA: 4.00

EXPERIENCE

Penn State Department of Agricultural and Biological Engineering <i>Teaching Intern</i> <ul style="list-style-type: none">Assisted students and instructors in course BE 301: Mathematical Modeling of Biological and Physical SystemsFacilitated course objectives by holding weekly office hours, teaching exam review sessions, and troubleshooting student work	University Park, PA <i>Fall 2015</i>
McCormick & Company INC, Materials Process Engineering Group <i>Engineering Intern</i> <ul style="list-style-type: none">Benchmarked physical properties of principal products using five instruments in food powder technology platformConducted over 300 experiments; processed data using descriptive statistical techniques and modelingApplied insights from benchmarking to opportunities for reducing visual fill waste, with yearly cost savings objective of \$160,000Identified data-driven opportunities for raising production output in blending departmentCollaborated with McCormick engineers in three countries to apply global knowledge base to Hunt Valley Plant	Baltimore, MD <i>Summer 2015</i>
Salis Laboratory for Synthetic Biology <i>Undergraduate Team Leader</i> <ul style="list-style-type: none">Led iGEM research team on codon optimization project with objective of maximizing protein expression in prokaryotesReceived gold medal from independent panel of judges at iGEM international research conferenceWrote original MATLAB scripts to redesign genes for fluorescent protein at codon levelAwarded the synthetic biology certificate for undergraduates by the Synthetic Biology Engineering Research Center (SYNBERC)	University Park, PA <i>Spring 2013-Present</i>
Penn State Department of Biological Engineering, Biomass Densification Project <i>Undergraduate Research Team Leader</i> <ul style="list-style-type: none">Managed team of four undergraduates, designed and executed over 50 experimentsPresented research poster at Penn State undergraduate research exposition, won third place in engineering divisionCo-Author, "Farm-Scale Biomass Pelletizer Performance for Switchgrass Pellet Production." 2015. Applied Engineering in Agriculture. 31(4): 559-567 (doi: 10.13031/aea.31.10803).	University Park, PA <i>Fall 2012-Spring 2013</i>

ACCOMPLISHMENTS

Biological Engineering 468 – Microbiological Engineering <i>Team Leader</i> <ul style="list-style-type: none">Received "Best in Class" award for design of industrial amino acid production system by fermentationPresented at Northeast Agricultural and Biological Engineering Conference, won first place in undergraduate paper competition	University Park, PA <i>Spring 2015</i>
Engineering Design 100 <i>PSU Engineering Student</i> <ul style="list-style-type: none">Received "Best in Class" award for design of human powered portable radio charging device	University Park, PA <i>Fall 2012</i>

ACTIVITIES

- Treasurer, Alpha Epsilon, Omicron chapter. National Honors Society of Biological Engineering, 2015-present
- Alumni Relations Chair, Alpha Gamma Rho, National Agricultural Sciences Fraternity, 2013-2014
- Active Member, American Society of Agricultural and Biological Engineers (ASABE), 2013-present

SKILLS

- PCR, molecular cloning, enzymatic digestion and ligation, DNA sequencing analysis, gel electrophoresis, DNA extraction, fluorometer assays (TECAN)
- Laboratory and Workplace Safety, certified through Penn State Environmental Health and Safety
- Excel, MATLAB, Minitab, R, SAP Production Management Platform, Adobe Illustrator, APE Plasmid Editor