

Rebecca Prouty

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Education

Michigan State University | East Lansing, MI

- Bachelor of Science in Biosystems Engineering Expected May, 2017
- GPA: 3.61/4.00
- DeBoer Family Scholarship recipient— award given to 8 students 2015, 2016

Sustainable Food, Environment and Social Systems Study Abroad | Australia

Spring 2015

- Met with representatives from 30 companies to identify their sustainability programs and practices
- Renewed soil and plant quality at an environmental rehabilitation site with a team of 10 peers
- Researched the effects of environmental manipulation on long term energy and food production capacity

Experience

Undergraduate Research Assistant | Food Processing and Safety Lab MSU- East Lansing, MI 2014-2016

- Assist graduate students with research on salmonella and bacterial cell growth on almonds, wheat flour, wheat kernels, and dates, as well as salmonella resistance in the stomach
- Collect data regarding salmonella growth within study parameters, such as thermal inactivation
- Prepare agar solutions for plating used in the isolation of bacterial cell growth
- Maintain laboratory cleanliness for a greater efficiency in experimental processing
- Autoclave biosafety hazards to prevent contamination of other projects and to protect employee health

Corporate Engineering Intern | Smithfield Foods- Kansas City, MO

Summer 2016

- Lead the design, vendor outreach, RFI and RFP process for CO₂ extraction from boiler flue gas
- Explored five different CO₂ extraction techniques from anaerobic digester biogas including membrane, PSA, amine, water-wash, and cryogenic methods
- Researched, contacted, and worked with 26 companies to evaluate their CO₂ removal processes from biogas; coordinated the project proposal process with four companies
- Identified \$2.7MM of recurring annual savings and a 12,000 ton reduction in atmospheric CO₂ output annually for Smithfield using CO₂ recovery at one facility
- Visited six potential CO₂ recovery sites to determine the viability of the technology
- Identified energy and water saving technology which could be implemented in production facilities

Quality Assurance Intern | Herbruck's Poultry Ranch- Saranac, MI

Summer 2015

- Performed bi-weekly solids analysis testing to ensure correct consistency in liquid egg products
- Monitored pH and temperature levels in processing areas three times daily to maintain quality products
- Updated Safe Quality Food books (SQF), Hazards Analysis Critical Control Point books (HACCP), and over 900 Safety Data Sheets (SDS) to ensure a safe and effective work environment
- Sampled and tested 45 packaged egg products hourly to maintain high quality in the outgoing products
- Supported the egg production process in both caged and cage-free facilities
- Helped process six organic certification applications

Customer Service Representative | MVP Athletic Club- Grand Rapids, MI

Summer 2014

- Input customer data into corporate database, processed camper registrations and balanced cash accounts
- Trained senior management on use of technology platforms, including Google applications and social media

Associate | Panera Bread- Grand Rapids, MI

Spring/Summer 2013

- Managed cash flow of purchased products and marketed food and beverage products to restaurant patrons
- Resolved customer concerns to promote greater overall customer satisfaction; recognized twice by management for superior customer service

Activities

MSU Biosystems & Agricultural Engineering Club

2015-2016

MSU Phi Chi Theta Business Fraternity

2013-2016

MSU intramural volleyball/soccer/flag football/basketball/Inner tube water polo

2013-2016