# **DANIEL X. BUHR**

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#### **Education**

Michigan State University College of Engineering Honors College East Lansing, MI

B.S. Biosystems Engineering Expected Graduation: May 2017

GPA: 4.0/4.0

Fowler High School Fowler, MI

Class of 2013, Valedictorian GPA: 4.0/4.0

## **Skills**

- ArcGIS
- Microsoft Office
- MATLAB programming
- · Total Station surveying
- · Creative critical thinking
- · Highly-motivated work ethic
- Teamwork
- Efficient verbal and written communication
- Graphical and statistical data analysis
- · Certified scuba diver

# Awards & Accomplishments

- 2016-17 Clarence and Thelma Hansen Scholarship recipient
- 2014-15 Michigan State University Tower Guard Member
- 2012-13 National Merit Scholar Finalist

# **Professional Activities**

- ASABE Member, April 2016- Present
- BE230 Teaching Assistant, January 2016- Present
- Biosystems Engineering Club Member, September 2014 - present

#### **Profile**

Detail-oriented engineering student at Michigan State University with experience in plant genetics, water resources, and engineering design. Seeking a full-time engineering position or admission into a graduate degree program.

# **Experience**

Undergraduate Research Assistant, Michigan State University Biosystems and Agricultural Engineering Department; East Lansing, MI

August 2015 - Present

Supervisors: Mr. Steve Miller, PE, Extension Irrigation Specialist; and Dr. Steven Safferman, Ph.D., PE, Professor of Biosystems Engineering

- Assemble data in Microsoft Excel from soil moisture sensors to assist Michigan farmers with crop irrigation and harvest schedules.
- Investigate the effects of deficit irrigation on corn and soybean yields using Microsoft Excel, Aquacrop, and SoySim computer simulation models.

Eco-Informatics Summer Institute, Oregon State University, Corvallis, OR

June 2016 - August 2016

Supervisor: Dr. Desirée Tullos, Ph.D., PE, Professor of Biological and Ecological Engineering

- Modeled sediment yields in a California sub-basin using the Revised Universal Soil Loss Equation (RUSLE) in ArcGIS.
- Surveyed stream cross-sections and mapped reservoir bathymetry.

### Study Abroad, Ecological Engineering in the Tropics; Costa Rica

December 2015- January 2016

Supervisors: Dr. Wei Liao, Ph.D., PE; and Dr. Dawn Reinhold, Ph.D., Professors of Biosystems Engineering

- Designed a prototype to sustainably and effectively harvest vegetation from a constructed treatment wetland.
- Networked with industry representatives in food production and bioenergy.

Environmental Intern, Delhi Township Wastewater Treatment Plant; Holt, MI

May 2015- August 2015

Supervisor: Mr. Allen Bryant, Environmental Coordinator

 Collected surface water samples and performed laboratory testing for phosphorus, ammonia, suspended solids, and E. coli.

Lab & Field Research Assistant, Michigan State University Department of Crop and Soil Sciences; East Lansing, MI

June 2013 - May 2015

Supervisor: Dr. David Douches, Ph.D., Professor of Crop & Soil Sciences

- · Organized data on genetic markers using Microsoft Excel and Genome Studio.
- Conducted gene transformation and chemical mutagenesis experiments.