

# ELIZABETH SCHAPPELL

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## EDUCATION

**North Carolina State University, Raleigh, NC**  
B.S. in Mechanical Engineering  
Minor in Biological Sciences  
4.00 GPA

**Expected Graduation: May 2018**

## WORK EXPERIENCE

### **Volvo Group, Greensboro, NC**

**May 2017-August 2017**

Chassis Structures and Advanced Calculations Intern

- Participated in a cross-functional team to develop a matrix of interfaces between cab and chassis parts, which will serve as a packaging reference and as a foundation document for design FMEA.
- Created design change notices, modified CAD parts and drawings, and edited the product data structure to resolve issues encountered during manufacturing or analysis.
- Performed FEA using HyperWorks to evaluate a new bracket and recommended design changes, which were implemented by the responsible engineer, to improve modal characteristics.
- Presented key accomplishments and learnings to the Chassis Vehicle and Dynamics Engineering management team, as well as provided feedback for further improving the internship program.

### **SPX Transformer Solutions, Goldsboro, NC**

**May 2016-August 2016**

Engineering Intern

- Utilized Microsoft Excel and extensive VBA coding to automate population of the Design Review packet, saving approximately 15 engineering hours in the production of each DETC transformer.
- Assisted design engineers with toll gate checks to find and rectify errors in the plant throughout the manufacturing process.
- Translated seismic analysis calculation documents from MathCad into Excel, making these resources more useful and available to mechanical designers.

### **NCSU Computer Science Department, Raleigh, NC**

**August 2015-May 2017**

E 115 Lab Instructor

- Taught two lab sections of college students XHTML coding, use of Microsoft Excel, and use of a command-line interface (CLI) each semester.
- Prepared and reviewed class materials, graded all assignments, handled email correspondence with students, and held office hours each week.
- Achieved student passage rates of 96% or higher each semester.
- Commended for receiving the highest percentage of "My lab instructor was excellent" ratings from students out of all 26 instructors (Fall 2015).

## COMMUNITY INVOLVEMENT

### **Lee Hall Council, Raleigh, NC**

**September 2014-May 2015**

Hall Council Treasurer

- Managed over \$9,000 of funds used to implement community-building programs for residents of Lee Hall.
- Attended weekly meetings held by Lee Hall Council to discuss projects, and participated in Inter-Residence Council training to interact with and learn from other Hall Councils.

## ACTIVITIES AND ACHIEVEMENTS

Nanostructures and Nanomanufacturing Lab Research Assistant

Tau Beta Pi Engineering Honor Society Member

NCSU Dean's List, Fall 2013 - Spring 2017

Experience using SolidWorks, PRO-E/CREO Parametric, HyperWorks software

Experience programming in FORTRAN, Matlab, MS Excel VBA