Joshua Bowman
131 West Fairmount
State College, PA 16801

jwb5470@psu.edu
(724) 986-4946

Current Address:                                               Permanent Address:

EDUCATION

The Pennsylvania State University                           University Park, PA
M.S. in Nuclear Engineering                                  First Semester
B.S. in Nuclear and Mechanical Engineering, Magna Cum Laude  Class of Winter 2016, Cumulative GPA: 3.94

Peters Township High School                                   McMurray, PA
Cumulative GPA: 5.1, Graduated with Highest Honors as PT Scholar

EMPLOYMENT

Westinghouse Electric Company                                Cranberry Township, PA
Nuclear Components Engineering Intern                        June 2016-August 2016
• Compiled as-built templates for secondary side components
• Performed tolerance stack-ups for various secondary-side components to determine necessary design dimension changes
• Created SolidWorks models for design offers and redesigns and performed Ansys analysis for component redesigns
• Reviewed technical documents and specifications for maintaining ASME Code and Westinghouse requirements

The Pennsylvania State University                           State College, PA
Course Grader/Exam Proctor (3 Classes, 2 Professors)          August 2015-December 2016

Westinghouse Electric Company                                Blairsville, PA
Technical Services Summer Intern                              May 2015-August 2015
• Conducted statistical analysis for stress safety tests from various annealing furnaces
• Developed experiments to determine the effectiveness of pilger lubricant candidates
• Reorganized tool room for auxiliary tools for cold pilger mills and improved organizational database

Ansys, Inc.                                                  Canonsburg, PA
Quality Assurance Summer Co-op                                June 2014-August 2014
• Reviewed code for new builds of software for next release
• Performed quality assurance testing for verification before releases of products on various operating systems
• Compiled customer responses for analysis and created relevant reports for analysis of product and company performance

CLASSES, PROJECTS, PUBLICATIONS

Senior Design Project: Boundary Waters Core Redesign           Spring 2016
• Developed a new fuel loading pattern to meet performance requirements for Westinghouse theoretical core
• Wrote and implemented Westinghouse ANC code to analyze the core under for various conditions
• Met all technical requirements and won best in show among all nuclear engineering teams at Penn State

Senior Design Project: Additive Manufacturing Metal Powder Separation  Fall 2016
• Developed and improved process for separating three different metal powders used in multi-metal printing
• First stage metal separation currently being implemented in X Material Processing multi-metal printer

Group Member: Engineering Design Project- CATA Redesign       Fall 2013
• Contributed to engineering project sponsored by ALCOA to increase sustainability on college campuses
• Worked with a team of four to plan, develop, and present new all-aluminum bus design which would save over $17,000 in fuel through standard bus lifetime and result in lower overall cost

VOLUNTEERING, ACTIVITIES, AWARDS

Awards and Honors:
• Penn State’s Hallowell and Harding Engineering Honors Scholarship, Dean’s List (all semesters)
• Owen M. Katz Scholarship (American Society of Materials)
• Bechtel Bettis Citizen Scholarship
• RMEL Foundation Scholarship (Electrical Energy Industry)
• Inducted member, Tau Beta Pi (International Engineering Honors Fraternity)

Activities
• Engineers Without Borders: Member
• American Nuclear Society: Member
• Alliance Christian Fellowship: Member, currently Head Trustee and Elder

Service
• Habitat for Humanity
• Family Promise
• Day of Caring

COMPUTER SKILLS

Programming and Design: MATLAB, Python, SolidWorks, Excel, Ansys TestBench and WorkBench