

# Ane Joan Muvadgah

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## SUMMARY

- Hardware Development Test Engineer with Mechanical Tests and Analytical skills .
- Excellent Communication, Problem Solving, and Innovative Skills.
- Proficient with Microsoft Word, Excel, Publisher, Power Point, Vibrations Research, and TP3 software.
- Familiar with the use of machines such as the drop and vibrations test tables.
- Excellent Academic Standing: Graduated with Magna Cum Laude Honors as the Outstanding Graduating Engineering Senior.
- Bilingual: Speak and write English and French fluently.
- Excellent Leadership Skills: National Society of Black Engineers (NSBE) Region V Academic Excellence Chair 2012-2013 (Region V consisted of 10 U.S. States, Central America, South Africa, and Dominica Republic) and University of Central Oklahoma (UCO) NSBE Founding Chapter President 2011-2013.

## EDUCATION

### Masters in Engineering

Mechanical Engineering   Rensselaer Polytechnic Institute   Graduated: August 2017

**GPA: 3.84/4.0**

### Bachelors in Science

Mechanical  
Engineering/Physics

University of Central Oklahoma

Graduated: May 2013

*Magna Cum Laude Honors*

**GPA: 3.81/4.0**

Minor: Mathematics

## EMPLOYMENT HISTORY

**January 2019- August 2020, Shock and Vibrations/Mechanical Test Engineer, Hardware Developer, IBM, Poughkeepsie, NY**

- Perform structural design review on mainframe computers and its components.
- Develop structural test methods for simulation validation.
- Develop shock and vibration test plan for mainframe computers and its components.
- Perform shipping shock, vibration tests on mainframe computers and its components.
- Perform operational shipping shock, vibration tests on mainframe computers and its components
- Perform packaging test on mainframe components.
- Conduct analysis of stress, deformation, and structural reliability of server systems and components.
- Consult with design engineers to perform simulation tests of structural performance of critical components under conditions of vibration, shock, static, and thermal loading.
- Assist design teams in their interpretation of analysis results.
- Prepare reports and deliver presentations.
- Utilize dynamic structural testing and verification methods, including Drop, Shock, and Impact.
- Conduct structural failure analysis.
- Perform environmental stress screening.
- Perform experimental modal analysis on large electronic assembly projects.

**January 2014 – August 2017, Graduate Teaching Assistant, Rensselaer Polytechnic Institute, Troy, NY.**

- Assisted in teaching classes in Engineering Economics, Manufacturing Processes and Systems I, and Thermal and Fluids Engineering classes.

**September 2011 – May 2013, Undergraduate Research Assistant**

- Performing research to investigate Loss Coefficients in Laminar Flows: Indispensable for the Design of Micro Flow Systems.

**January 2011 – May 2013, Undergraduate Engineering Physics Drill Instructor**

- Perform a teaching session one hour a week with students in Physics for Scientists and Engineers

I and II.

**August 2010 – May 2013, Undergraduate Math Tutor**

- Tutor students during tutoring sessions in the math lab in Algebra, Calculus I, II, III, IV, Business Calculus, Linear Algebra and Differential Equations.

**May 2012 – August 2012, CDM Smith Cambridge, MA, Mechanical Group Heating Ventilation and Air Conditioning and Plumbing Engineering Intern**

- Worked with a team of ten other engineers to provide design solutions for Heating Ventilation and Air Conditioning and Plumbing for clients.
- Reviewed drawing, sketched drawings, reviewed submittals, visited sites, and filed drawings.

**June 2011 – August 2011, Johnson Controls Inc, Capitol Heights MD, Energy Solutions Engineer Intern**

- Worked in a team to help develop Performance Contracting projects to provide improvements and Energy Conservation Measures (ECMs) to customers by performing energy audits and provide solutions.
- Worked on projects to develop ECMs for the NSBE Headquarter Building, Virginia and the University of Maryland, College Park.

**ACTIVITIES**

IBM POK Community Day 2019

IBM POK 5K Run/Walk 2019

Big Event Volunteer 2009-2011

Earth Day Volunteer 2011

Global Impact Volunteer Efforts 2009-2010

Invisible Children 2009-2010

Broncho Corral Leadership Institute 2009

**LEADERSHIP**

IBM New Hire Network Steering Committee 2019-Present

Technical Research Exhibition Co-Chair, National Society of Black Engineers Annual Convention (2013)

National Society of Black Engineers Academic Excellence Chair for Region V (2012-2013)

American Society of Mechanical Engineers (ASME) (2012-Present)

Founding President of the National Society of Black Engineers (NSBE) University of Central Oklahoma Chapter (2011-2013)

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) (2011- Present)

Women of Color in STEM Conference (2011)

Society of Women Engineers (2008-Present)

Sigma Alpha Lambda Leadership and Honor Society (2008-Present)

**HONORS AND AWARDS**

Rensselaer Polytechnic Institute Honors Convocation (2016)

Link Foundation Fellowship (2016)

Magna Cum Laude (2013)

Outstanding Engineering Graduate with Highest Engineering Honors (2013)

UNCF CDM Smith Scholar (2012)

National Society of Black Engineers S.D. Bechtel Jr. Foundation Scholarship (2011, 2012, 2013)

Whit Mark Award for Best Engineering Junior Student (2011)

National Society of Black Engineers Academic Pyramid of Excellence Wall of Fame Honors Level (2010-2015)

Engineering Physics Achievement Award (2010)

Fitzgerald Engineering Physics Award for Modern Physics (2010)

International Society of Automation Education Foundation Scholarship (2010)

National Network of Presbyterian College Women Foundation Scholarship (2009)

Most Improved Employee of the Month (January 2009)

President's Honor Roll (2008, 2009, 2010, 2011)