**Adwoa Manu**

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taskstream.com/ts/manu/adwoa01

**EDUCATION**

August 2015-Present **Manhattan College** Riverdale, NY

***Bachelor of Science in Mechanical Engineering, Minors in Math and Digital Media Art***

GPA:3.2

Presidential Scholarship, National Science Foundation***,*** (NSF) S-STEM Scholarship, American Society of Heating Refrigerating and Air-Conditioning Engineers (Treasurer), Society of Women Engineers, AmericanAssociation of Mechanical Engineers, Engineering Ambassadors (Team Leader)

**RELEVANT COURSES**: Introduction to Thermodynamics, Fluid Mechanics I, Technical Graphical Communication, Introduction to Engineering Optimization, Thermal/Fluids, Green Building & Design

**SKILLS**

***Computer***: Proficient: MS Word, PowerPoint & Excel, NX; Intermediate: Revit, AUTOCAD, MATLAB, ANSYS(Fluent)

***Language***: Fluent in English, Native in Twi

**RESEARCH**

**PROJECTS**

**Senior Design Project: Solar Decathlon in Cali, Colombia**

September 2018-Present **Manhattan College** Riverdale, NY

* Working with Architecture, Civil & Electrical engineering students in Colombia and Germany to build a sustainable house that meets the needs of its occupants for the 2019 Solar Decathlon in Cali Colombia
* Using REVIT to create a simple model of architectural design and perform energy analysis
* Creating CFD model of house using ANSYS(Fluent) to simulate wind flow and heat transfer

**RESEARCH**

**Current Research**

Finding local materials in Ghana to build an affordable and efficient solar cell

**Summer Research Scholar**

Research topic: **Analyzing solar PV panels and finding local materials in Ghana to build an affordable panel**

June 2018-October 2018 **Manhattan College**  Riverdale, NY

* Experimented with dye sensitized solar cells by replacing TiO2 with different types of clay
* Used excel for solar irradiation calculations to find the optimal tilt angle for the solar panel
* Attended seminars to develop research skills like writing, data collection and learned about ethics in research
* Presented results at Summer Research Scholar conference at Manhattan College

**Soft Robotics** December 2015-September 2016 **Manhattan College**

Studying the nature of different materials and organisms to mimic their behavior in Robotics designs

**EXPERIENCE**

June 2017-September 2017 **Burke Medical Research Institute** White Plains, NY

**Edwards lab, Research Intern**

* Created a system in excel using VBA to collect patient information, forms, and to tally patient appointments that increased productivity and efficiency in lab
* Performed testing on new robots and their respective software for quality, comfortability and efficiency.
* Learned about noninvasive brain simulation methods for improving motor recovery of stroke recovery patients