



Johan Agudelo



Mechanical Engineer

Johan Agudelo is a Mechanical Engineer at Harris Energy Solutions with experience in Energy Auditing and Building Commissioning. He graduated from Rutgers University with a Bachelor's degree in Mechanical Engineering. His passion in building sciences has allowed him to quickly relate mechanical engineering theories to energy conservation in building systems. Taking the knowledge of existing building systems, Johan seamlessly applies these principles to new building commissioning.

Education

Rutgers University – New Brunswick
2017-2021
B.S. Mechanical Engineering

Relevant Experience

- Conducted campus-wide ASHRAE Level III energy audit for New Jersey's most prominent College including site visit inventory, energy calculations, and energy audit report development.
- Performed new building commissioning for building HVAC systems. Systems include ventilation, controls, chillers, and boilers.
 - Compilation of the commissioning plans
 - Design documentation reviews
 - Start-up, pre-functional, and functional checklist creation
 - Execution of checklists
 - Issues database management and resolution
 - Generation of the final commissioning report
- Scrutinized energy reports made by 28 research centers in the US under DOE to ensure energy audits. Deciphered inconsistencies in how air compressor savings were calculated based upon each center to help implement a standardized plan for analysis across all centers. Investigated different approaches on how to calculate savings based upon V-belts tension for centers to implement if there was a lack of equipment available. Conducted research based on block chain, wave energy, and batteries under the supervision of a graduate student to collect information and formulate thesis.
- Devised a barcode system for orthotic equipment in order to increase efficiency for the inventory system by 50%. Analyzed and evaluated different barcode options at varying costs to increase the organization of the medical devices at the minimum cost. Adjusted and revised sensitive patient information in order to ensure quality care for each patient.

Certification and Skills

- Effective communication and listening capabilities
- Ability to produce an effective LEED-like report using ASHRAE standards and software such as eQuest
- Microsoft Office (Word, Excel, PowerPoint), MATLAB + Simulink, Maple, SolidWorks, Ansys
- Languages: Spanish, Italian, English