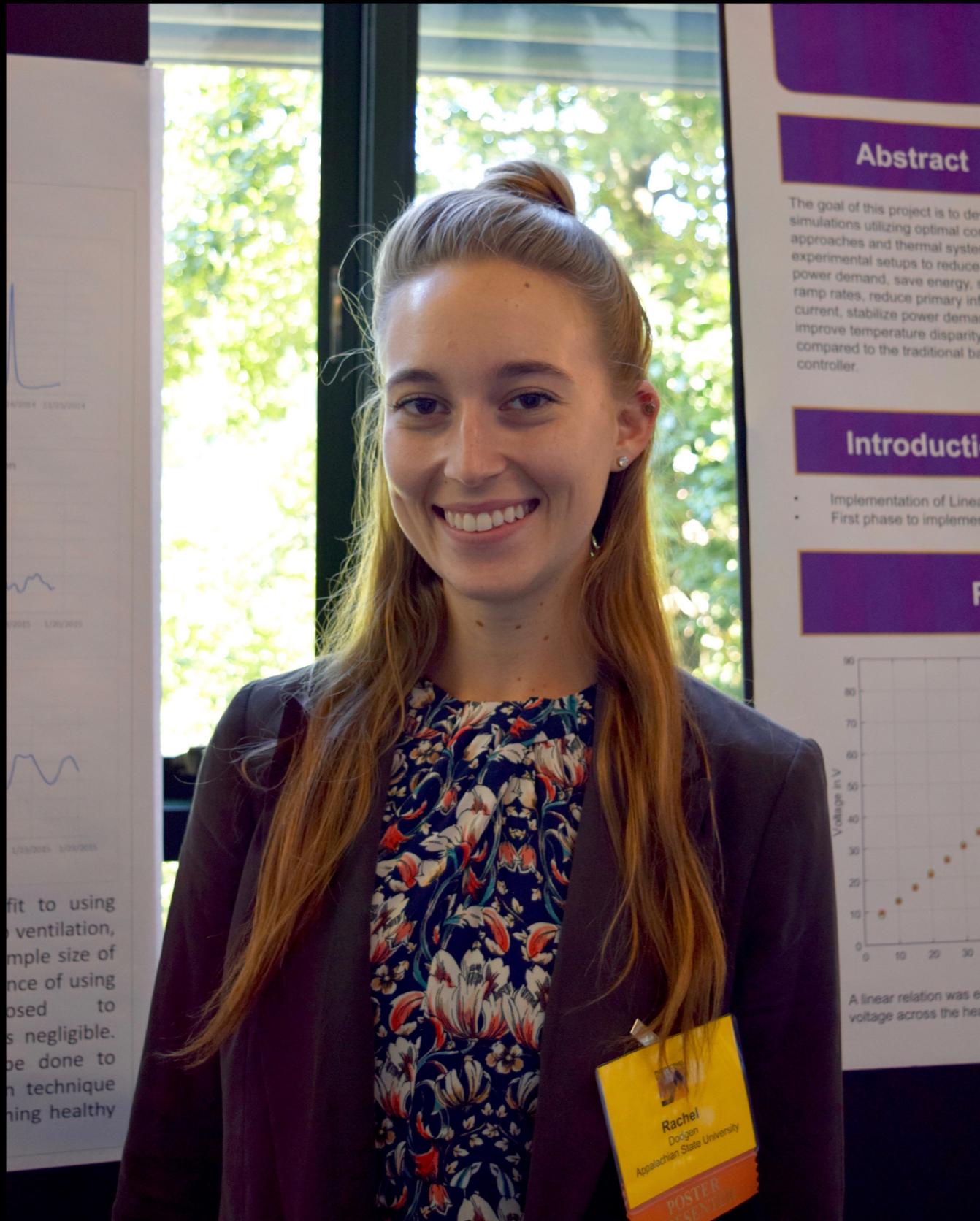


The background of the image is a vibrant blue sky filled with fluffy white clouds. In the foreground, there are lush green trees and a prominent dark red-leaved plant on the left side. In the middle ground, a tall, dark, slender tower with a pointed top stands out against the sky. Below the tower, there are several buildings with green roofs, and in the far distance, rolling green hills are visible under the bright sky.

Energy Summit 2017 Perspectives Photo Series

Devyn Barron

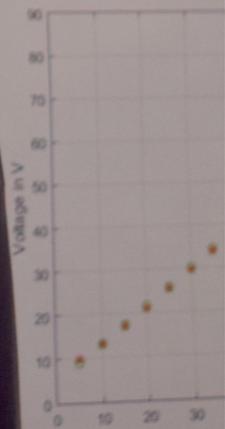


Abstract

The goal of this project is to develop simulations utilizing optimal control approaches and thermal system experimental setups to reduce power demand, save energy, and ramp rates, reduce primary influence, stabilize power demand, improve temperature disparity compared to the traditional bar controller.

Introduction

- Implementation of Linear
- First phase to implement



A linear relation was established between voltage across the heat

“Indoor air quality and ventilation is what I am most passionate about. My degree is in building science so I’ve been concentrating on how we can maximize ventilation and how we can keep our buildings safe and healthy and also keeping our energy in line so we aren’t wasting a lot of resources.”



“I wanted to get outside of my own comfort zone so I just felt like [this] was a great thing to do this summer... I’ve seen a lot at the summit as far as conserving energy and when people think about the energy summit they think about the environmental factors, but the session I just came out of, the lady who was speaking... well I put it into my own perspective: conserving individuals, conserving people, and conserving the environment you live in and how to, you know, make where you live better instead of moving out to a different area.”

“One of the things I see is that issues with sustainability, like climate change and other issues, often disproportionately affect [those] disenfranchised and I think a lot of those people affected are women. Especially in developing parts of the world.”





“I have a focus in gender, women, and sexuality studies but I am doing social work. Whenever it comes to energy and individual spaces in this community I feel like I’ve done a lot of that in my classes and it’s really interesting to just connect with all of the people because there are a lot of business opportunities here, along with sustainable energy and sustainable technology.”

“When I heard about one of the student speakers talking about NC State and Climate Reality, that was really moving because I feel like every student can like go start their own organization and everyone here is so passionate about what they’re doing [that] there is a strong sense of purpose. I feel like it is a good way for others to hear about environmental companies that others haven’t heard about like startups started by university students or young professionals.”



“You just have to keep working super hard, and never take no for an answer. When you know as a college student, it’s really easy to come back from class and watch Netflix and do whatever, you’ve gotta find little times to do activities and get your to-do list done. And if that means when your friends are going out and you have to stay in, so be it.”



“I think energy sustainability has been a big thing for a while so everybody needs to get on the bandwagon and put their shoulder behind this and see it through.”



Devyn Barron



“What drew me to the summit was the importance of the sustainability topic, [and] being able to meet with likeminded individuals who are also taking action in the field of sustainable development and research. Much of what I have seen at the summit is very inspiring, and being able to discuss ideas and have collaborative effort with professors and students greatly showed me the importance for how we need to work as a collective to make the changes that our futures all depend on.”

“In a space like this everyone is just looking to get to know each other and get to see different perspectives of sustainability.

Even if they are older and intimidating, chances are they are going to be perfectly fine to talk to. You could learn, ‘oh this is the person that is in charge of solar panels on this campus’. Just extend your confidence and reach out to other people.”





“I want to make sure that people don’t forget that energy efficiency is like a fifth fuel, ‘cause I think it is overlooked sometimes. Especially with the push for renewable energy, which is really good, but I want people to not forget about their existing buildings. 95% of the buildings out there are existing and they are there for fifty years or longer so there is a lot we can do with those. I think they should be more of a priority.”



“The most important thing is knowing that I have to get out of my engineering head of the technology aspect of renewable energy and sustainability, ‘cause that’s kind of how it is, at least that’s how I experience it for my engineering classes. You work with other engineers but that’s not how it is in a work place. You work with other people and other businesses and you have to be involved in those and be a part of the process. Being here at the summit I learned different processes people have to go through in order to achieve sustainability. So I learned that I need to be more involved in what they’re doing even though I may not understand what’s going on, but just me being there and having input I believe that I will not only help them but I will have a better understanding of their role.”



“What impacted me the most was in the student summit, and I think she [Majora Carter] said it again at the keynote, she said we measure our success by how far away we move from our hometown, and that really resonated with me because I come from a small mountain town in North Carolina and everyone tries to move away. So I can relate to her on that level, plus she’s just a bad a**.”

“Both of the keynote speakers have been so fricken' powerful, especially Majora. She was so wonderful and I love her.”



“I think sometimes at this conference there is a lot of the science part but the scientists need someone to take that information and translate it to the public and get the public on board, and so I think it was good that she, [Gina McCarthy] highlighted the social aspect of it, because I think that’s where what I want to do falls more into, so it was really nice to see that. I am super interested in all the energy strides we have made but it’s also like I am not going to be the one making those strides, but I want to be a champion for those strides.”

Appalachian Energy Summit 2017

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