

# Student Spotlight: Jackson Morgan | College of Engineering

04/20/2021

Apr. 20, 2021 — Jackson Morgan has always been interested in space, and he chose electrical engineering so he could work on electric propulsion. But by the time he came to USU, Jackson says, “I was far more concerned about climate change and the state of our energy system here on earth and decided to focus on clean energy technology instead of space.”



*Jackson is pursuing a master's in electrical engineering and hopes to use his expertise to further clean energy technology.*

Meet Jackson, an electrical engineering master's student from Greenfield, Mass.!

Q: Why did you choose to attend USU?

A: It was really a gut feeling. I didn't have USU on my radar until I had already been in college for a year. But when I took a tour, I knew it was the place for me, and I had no idea why.

Q: What is your favorite class?

A: My favorite class at USU was hands-down Fundamentals of Power Systems. It gave me the tools to properly research in the renewables and transmission and distribution networks area of electrical engineering, and it turns out I'm pretty good at it.

Q: What has been the best part of your engineering education so far?

A: The best part has been getting involved in research and getting to know the great faculty and students doing very interesting work in my field and closely-related fields. I am always learning from the faculty and students around me.

Q: Are you involved in research?

A: I'm a graduate research assistant at the USU Power Electronics Laboratory, part of the new [ASPIRE Engineering Research Center](#). I work primarily on projects with a power-systems focus, and much of my day-to-day work involves modeling of the power grid.



*Jackson backpacking in Yellowstone with his partner, Sydney, and family last summer*

Q: Tell us about internship experience.

A: I interned at Midé Technology outside Boston in summer 2018, which gave me exposure to a real engineering workplace, microcontrollers, and the fundamentals of electronics assembly and testing. I interned at ISO New England in Holyoke, Massachusetts, in summer 2019. The ISO gave me real experience working for a grid operator and understanding how power is transmitted and marketed across several states. I also learned I really want to work at an ISO or utility.

Q: What is your advice for people thinking about grad school in engineering?

A: Identify what you're interested in and search for professors who are doing work in that space. Ask them about their ongoing projects and they will be more than happy to tell you about it. There's almost certainly a space for you to help with those projects and get exposure to very interesting work.

Q: What's your favorite place you've ever visited?

A: Acadia National Park in Maine. I spent less than a day there, but I think it's the most beautiful place on Earth.

Q: Favorite movie?

A: “Good Will Hunting”



*Jackson at the Hoover Dam power plant in 2019*

Q: Favorite holiday?

A: Thanksgiving because it's a day of relaxing and eating with family, and Leap Day because it's rare.

Q: What are your hobbies?

A: Cooking, reading, biking, watching movies

Q: Who is your hero?

A: Aaron Swartz. He was a figure who somehow managed to simultaneously be a leader both in advanced technical expertise and political activism, particularly in the field of open access to information. It's a terrible tragedy he's gone.

Q: What topic do you wish more people would learn about?

A: Where your electricity comes from! Electricity is so fundamental to making modern life possible, while its production from fossil fuels has been slowly making the planet less habitable for over a century. Knowing where it comes from, what it really costs, and where the vulnerabilities are in its generation and consumption helps all of us make more conscious decisions about how we use it and how we organize our society around it.

Q: If you could resolve one problem in the world, what would it be?

A: Climate change. That's the whole reason I'm working in this field. Please help beat it so I can actually retire someday.

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*Jackson Morgan graduated with a B.S. in electrical engineering from USU in December 2020. He was named the Electrical and Computer Engineering Department's 2020–2021 Outstanding Senior.*