

Alexandria Gordon

Graduation Year: Senior

College: Architecture

Major(s): Architecture

Minors(s): Sustainability

Scholar Group Membership: no

Did you received other funding for this project?: no

Could you have completed this project without CUSE funding? No

More details on CUSE funding assistance?

Project Title: Building Materials and Methods in Light of Climate Change

Project Location: Charleston, South Carolina

ND Faculty Mentor: Samantha Salden Teach

Project Type: Research

Why did you undertake this project/experience? Research/experience necessary for senior thesis or capstone project

Did your funded experience help you:

[Deepen your understanding of your coursework or field of study]: Very Much

[Discern your interests and post-bac goals]: Very Much

[Become confident in your ability to set and achieve your goals]: Yes

[Gain a more nuanced view of local, national, or global communities]: Very Much

[Improve your written and verbal communications skills]:A Little

Tell us about your experience.

I met with architects and professors in the area to discuss common issues seen in the area due to poor building construction and materials. I then visited many houses to document material failures. I learned how precipitation is getting trapped behind modern building materials without owners knowing, leading to mold and material failure. I also learned how applying modern cement onto traditional brick harms the historical soft brick. I also learned about the function of the single house type and how it can be used properly again if there comes a time when we do not have power and must rely on architecture to create a comfortable building.

Describe the impact this project had, both on you as a student-scholar and on the people you worked with.

As a student-scholar I was able to witness first hand some of the materials I am taught in class. This project reassures those in Charleston who fight for historical preservation that there are still young people in the field who want to continue this preservation work and value Charleston's historical architecture.

Describe how this experience is connected to your plans as a student or future professional.

As a future professional, I will be sure to build in a way that is safe to humans and the environment. I will be aware of failures that can happen, and how to build without dependency on power for AC, when that is not a guarantee. Specific to Charleston, I learned more about how it is a good idea to build with portland cement to protect against earthquakes and high precipitation. Also as a future professional I know now to be critical of new building materials such as spray foam without testing what leaks and other wrong things could happen since they have not been time tested on buildings yet.

What advice would you give other students who are planning to pursue similar projects?

I would give advice to reach out to more people in the field. I learned most through talking to professors, so good advice would be to not shy away from making even more meetings. People who are familiar with the place and field have a lot more passion than what you can read in a book. My advice would be to front load the visit with meetings because these people can direct you to good areas/buildings to help you better.

I acknowledge that this form has been filled out truthfully and to the best of my ability. I understand that this information will be shared with many different CUSE constituencies. As such, I have provided as much useful information as I was able. I understand that CUSE will not complete my award disbursement until this form is successfully completed. If I have any questions or concerns, I will contact CUSE before submitting this form. To illustrate that you understand all of these points, please enter your Notre Dame email in the box below.
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