Engineering Student Featured in Magazine

Internship lands student in engineering publication

By: Danni Francis

This past summer, Philip Taylor Coleman, sophomore electrical engineering major and math minor, affectionately called TC by friends and family, participated in a prestigious internship with The National Academy of Engineering (NAE) and was featured in their magazine.

The magazine article included mention of the projects Coleman worked on during his internship and what he plans to do with his internship experience. Every year the magazine highlights the achievements and current projects of the interns at NAE.

“It feels great to be featured in the magazine,” he says. “I got the news when I was sick during midterms and it completely lifted my spirits.”

NAE, located near Coleman’s home in Washington D.C., is a part of The National Academies of Sciences, Engineering and Medicine (NASEM), which are nonprofit institutions that provide expert advice and research on some of the most pressing challenges facing the nation and the world. NASEM is the nation’s preeminent source of high-quality, objective advice on science, engineering and health matters.
Coleman obtained the 10-week internship through another internship he did over two years ago with the Commonweal Foundation. Stewart Bainum, an Adventist who knew the hardships of paying tuition and building a future in tandem, founded the Commonweal Foundation (CF). Commonweal frequently works with Adventist institutions to help support students in their pursuit of education and work experience.

After completing the Commonweal internship, Coleman was contacted in December of 2014 by NAE, which partners with the CF to obtain interns.

Throughout the course of his NAE internship, Coleman primarily conducted research to facilitate engineers by providing relevant research and resources.

“I did a lot of meta-research,” he explains.

Coleman read abstracts written by others who have done research on engineering education and the effect professional societies have on them.

“It was a different side of engineering—specifically a research and reading oriented side,” says Coleman. “Research can be really difficult to sift through. I had to adjust the way I thought; sometimes it was finding needles in what seemed like a stack of needles. Over time, though, I got a lot better at wading through research.”

During his internship Coleman worked on three different projects: Making Value for America, Pt. 2; The Education for Professional Engineering Societies; and Frontiers of Engineering Education.

“I learned a lot from this experience,” Coleman says. “Not only was I exposed to an office environment, but I developed as a person and professional throughout the internship because of the responsibilities I had and the people I worked with.”

In his future career, Coleman sees himself striking a balance between researching and solving mathematical problems. He is interested in engineering policy and wants to use engineering for humanitarian projects.

His current work and research includes his position as team leader for the Hyperloop Competition in which he and other team members are competing. Based on concepts by Elon Musk, CEO and product architect of Tesla Motors, the project involves building a subsystem for a transportation pod that can travel at speeds of up to 700 mph.

In addition to his position as team leader, Coleman is a member of Engineers Without Borders (EWB), which partners with communities to meet their basic needs through various engineering projects. EWB has a chapter on the Andrews University campus thanks to proactive students such as Coleman.

When he is not in school, Coleman is a classical pianist, citing Rachmaninoff as his favorite composer.
He plans to continue his work with The National Academy of Engineers, and has recently signed a contract to work with them for two additional summers.

“I’m going where opportunities arise,” he says with a smile.

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