COLLEGE OF ENGINEERING
INDUSTRY INSIGHTS

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B.S. in Mechanical Engineering, 2017;
M.S. in Mechanical Engineering, 2018

Current Title: Hardware Engineer

Company: SlateSafety

HELLO MY NAME IS

Tell Me About Your Job

SlateSafety is a startup with the goal of selling custom wearable devices for monitoring workers, mainly for detecting heat stress. I design CAD models of wearable devices and create 3D-printed prototypes using various methods and companies. Once the physical prototypes are vetted for field use, we injection mold the enclosures. There is a lot of checking to see if the parts have uniform thicknesses and the required amount of draft angles.

How did your major or classes at CMU help prepare you for your job?

The stress and thermal analysis classes instantly helped me understand many concepts and issues. I also took a lot of mechatronics and electrical courses to have a good enough background to make design decisions with an electrical engineer. I also took entrepreneurship classes that helped me make fast decisions and think about what would be best for the company's success.
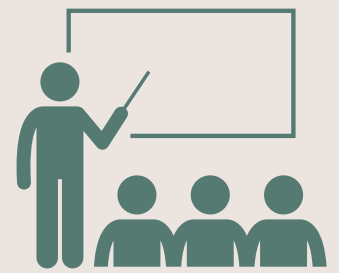
What other activities, hobbies, or experiences helped to prepare you for a job in your industry?

I made engineering projects as a hobby, worked at maker-spaces at CMU, and had hands-on experience. I was in clubs like Buggy and Rocket Club. I did school competitions like Build18, general hackathons, and entrepreneurship competitions like the McGinnis Venture Competition.

What classes would you recommend to a student who is interested in a job in your industry?

ME Classes: Gadgetry class (Undergrad)
Entrepreneur Classes: Intro to Entrepreneurship (Undergrad)
IDeATe: Physical Computing (Undergrad)

What advice would you give to a student who is in the early stages of considering a career in your industry?

Working in a startup makes you wear many hats. At this point, I am in between a mechanical engineer and an electrical engineer. Have a passion for learning and become well-rounded in mechanical, electrical, and software engineering.

What advice would you give to a student who is preparing to apply for an internship/job in your industry?

Make a portfolio to show your work. Mechanical Engineers have the unique advantage that the pictures and documentation of their projects speak for themselves. I have gotten many jobs just based on my website portfolio. My Website portfolio: https://www.randaya.com/