Heather Vooys

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When I started at the University of Montevallo, I was double majoring in Mathematics and English. When I graduated from the University of Montevallo as Summa Cum Laude with Superior Academic Achievement, I was a Mathematics major with an English minor.

Studying mathematics in college was a revelation. It was so much more than the algebra and pre-calculus we learned in high school. It was exhilarating to learn new mathematical techniques.

At the University of Calgary, my research became much more applied. There was a lot more coding involved but I was still able to take courses in mathematics that interested me. While my degree was on more of an applied track, I was able to study some pure subjects as well. Research at this level became more independent.

My thesis focused on the mathematics behind using sound waves to study what is under the Earth's surface using different technologies. It was a topic that allowed me to take the interdisciplinary approach in which I thrived, as I needed an understanding of geophysics as well as mathematics to conduct my research.

When I'm not doing mathematics, I'm often playing video games or board games. I also enjoy learning new computer programming languages. If I'm not doing any of those things, I'm probably picking up a new craft. My current craft is knitting – specifically socks and sweaters. They're way more challenging and way more fun. I also quilt and enjoy watercolor painting. I find that creating art usually relates back to mathematics at some point for me.

Why Mathematics?

Almost weirdly, my love of literature led to a career in mathematics. I loved analyzing stories and writing essays discussing the work. What is a proof in mathematics if not a mathematical essay?

Read our complete interview with Heather