

George McWilliams

B.S. in Electrical and Computer Engineering (2004)
M.S. in Electrical and Computer Engineering (2006)
Robotic Research, LLC, Clarksburg, MD

Describe your overall duties/ responsibilities as Director of Advanced Programs:

I lead some of our major engineering programs related to unmanned vehicles and GPS-denied localization. My current effort is leading a design team for a hybrid air/ground robot. I manage a team of about 20 engineers, ensure the program is running within budget, set up demonstrations for customers, and in my spare time I get to develop embedded software for our robots.

Explain the skills/abilities that are required for being successful in your role:

Multi-tasking was not one of my strengths several years ago, but it's almost a requirement for a working at a diverse, fast-paced small business. Being organized and being capable of clearly communicating ideas and designs to co-workers and customers is also very important.

What advice would you give to students who are considering majoring in Electrical and Computer Engineering?

First, make sure you love what you're doing. Even if you're a live-to-work type of person, you shouldn't be wasting 40+ hours per week doing something that you don't love.

Second, make sure you understand the fundamentals of your field. I can't count the number of times I wished I had paid more attention during a certain linear algebra class or signal processing class. Knowing the fundamentals can make an engineer so much more productive at his/her job.