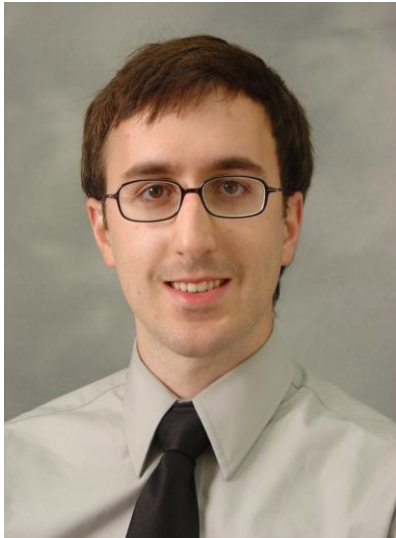


Global Professional Engineering Profile:
Alexander H. Taylor, Purdue University BSME Program



Why Engineering?

I grew up in a small Indiana town where there was never much to do. The one thing I always had with me was my imagination. Whenever I looked at a plane as it flew overhead I would think to myself, “How does that work?” When travelling to Chicago on a family trip I saw the enormous buildings looming on the horizon and I would ask myself, “How were these made?”

By the time I reached high school I decided to take a handful of shop classes in which we learned to rebuild small engines and weld. It was at this stage in my life that answers to my questions of the inner workings of machines and systems started to be answered and it was

exciting. I knew the moment I started the engine that I had just reassembled in shop class that I wanted to be an engineer.

Engineering Opportunities

Getting Started. Coming to the realization that I wanted to be an engineer created an overwhelming wave of emotion. I knew that there would be plenty of hard work ahead of me and for once in my life I was completely driven to do something of impact. Unfortunately, by the time this epiphany arrived it was already my senior year of high school and I had not even taken pre-calculus.

I applied to every college in Indiana and was accepted to Indiana State University which was exciting at first, until I realized they do not offer any engineering degrees. Then heartbreak arrived in an envelope when I received a letter from Purdue University stating that I was rejected because I did not meet their course requirements to enter their engineering program. The caveat in the letter is that I was accepted to their North Central branch and if I could do well there then they would accept me. So I accepted this proposition and took on a part-time job at United Parcel Service to help pay for it.

Taking Control. After two years of making up for lost time from high school at Purdue North Central, I applied to the School of Engineering at Purdue University. Two weeks later I once again received a letter from Purdue’s main campus, but this time the letter read, “You have been accepted.” I transferred schools and also transferred jobs to the local UPS center in Lafayette, Indiana.

I decided at that moment that I was not just going to go to school, I was going to excel. I was not going to just work at UPS, I was going to be supervisor. On my first day of

work at the new center I got to know the center manager, something I had never done before. I had always seen safety issues around work that were never addressed by immediate supervisors and for the first time I was taking it up with the center manager and discussing what could be done.

After a few months working in Lafayette I was promoted from Package Handler to Package Operations Supervisor for United Parcel Service. For the first time at work I was calling the shots and I had the responsibility of running a five man team. I never realized the difficulty of managing five different personalities and coordinating the efforts of five different people. But I caught on fast and led by example and work was actually turning out to be less like work and more like fun in a strange way. My boss would come to me and say, "We've got two hundred packages to process and this list of people need to pass this safety exam," and it was left up to me to organize the work and get it done on time and efficiently. I think that was what was so exciting and in the end fun to do.

Lessons Learned. After seven months as supervisor and two semesters at Purdue's main campus I came to the conclusion that I could either be a great supervisor or a great student and not have both at the same time. Work was requiring that I stay there for thirty hours a week and school was demanding that I go to class, study and do homework for fifty hours a week. I left UPS on great terms with my boss, my coworkers and my employees and I do not regret for a minute deciding to knuckle down and hammer out the last three semesters of school. I ended my three years at UPS having acquired skills and done things I did not know I could do when I arrived, such as: selecting job applicants, firing employees, time management and motivational skills.

Vision for the Future

Graduate School. After graduating in spring 2010 I am seeking to obtain my Masters in Mechanical Engineering also at Purdue University. I have met several of the Professors and would enjoy further courses taught by them. I would like to delve deeper into subjects touched in my undergrad classes such as Turbo Machinery and Combustion and their relationship to power generation. I sincerely believe that mastery of these subjects will help propel me from being that curious kid from Wheatfield, Indiana to a knowledgeable man with the impact to positively affect the lives of people globally.

Impacting our Energy Future. My ideal career deals with power generation and turbo machinery. The National Academy of Engineering details "Make solar energy economical" and "Provide energy from fusion" as two of ten grand challenges to future engineers. I would like to work with any organization up to and including the Department of Energy in securing our energy future. I wholeheartedly feel that as fossil fuel use continues to fuel economic and social instability our future depends on renewable, efficient energy. My mission is to play a part in addressing the aforementioned challenges for the sake of our future.

November 13, 2008