Francis G.

Highway Safety Engineer and Researcher

July 2017 - Works at: VHB, in NY-NC-MA...

General Field of Work

Engineering

Undergraduate Education

Clarkson University for Civil Engineering Minor: No reply

Undergraduate Non-Academic Interests: Clubs

Graduate Education

The Pennsylvania State University for M.S. and Ph.D. in Civil Engineering, Minor in Statistics

Professional Societies or Organizations

American Society of Civil Engineers, Institute of Transportation Engineers

What high school academic interests led to your college & career path?

Math

Please briefly describe your path to your current job

Interest in environmental science and being outdoors. This led to civil and environmental engineering. While completing my B.S., I took a course in transportation and became interested. I was also working summer and winter breaks as an intern for a civil engineering firm. A college professor recommended I explore options for grad school based on my marks. The University of Virginia and Penn State both offered excellent opportunities. I selected Penn State based on the financial aid offered and was very happy with my decision. While at Penn State, I was

supporting a research project for the Federal Highway Administration; this was my dissertation topic, but we were also a subcontractor performing data analysis for a large safety study. While meeting with the prime contractor (VHB), I delivered a presentation of my results and they offered me a job (casually). They soon posted a formal job offer and I applied. I've continued to conduct research for the Federal Highway Administration as well as for several other Federal and State agencies.

What are a few things that you like best about your job?

Helping to save lives and prevent injuries, diversity of work (field work, office work, research, training)

What are the most important technical skills needed in your job?

Problem solving, statistics, technical writing

What are the most important non-technical skills needed in your job?

Presentation skills, client interaction

What are some of the most challenging aspects of your job?

Concurrent deliverables, waves of long hours, traveling can be positive or negative (as in -15 deg in Bismarck, ND in January)

Any advice for students about to begin their college career in September?

Highway safety is a very rewarding career opportunity because you have the opportunity to address one of the leading causes of death in the U.S. and the world. With the move toward connected and automated vehicles, there will be some challenges but even more opportunities, and hopefully fewer deaths and injuries on our roadways.