Nicholas P. Taliceo

Consultant, Analytics & Research

The Travelers Indemnity Company

M.S. - Geospatial Information Sciences
University of Texas at Dallas, 2018

B.A. - Mathematics, WSU `16

When I first entered Westfield State, I was lost. I was thinking about majoring in chemistry, but I didn't have a major declared. I had no material plans for my future and this uncertainty caused me a great deal of angst. Because I was undeclared, my first semester's courses were selected by the registrar on my behalf. All of these turned out to be introductory core courses. The math class I was enrolled in was called *Mathematical Explorations* – a course geared to give students a greater appreciation of mathematics by looking at math through a non-traditional perspective. At the time, I did *not* want to take that class. Since my "plan" was to be a chemistry major, I knew I needed to take calculus and I thought that taking an elective math course would put me behind my future course work. My feeble attempt at changing classes the week before the semester started failed. Alas, I remained enrolled in Mathematical Explorations.

As it turns out, not dropping that class was a pivotal part of my life and was the unexpected beginning of a passion for mathematics.

In Mathematical Explorations, I quickly found a deep fascination for mathematics, learning in a way that I never did before and having my mind opened to huge breadth of applications mathematics has to offer. From that moment, I was hooked and I officially became a mathematics major. I never bothered taking a chemistry course...

At Westfield State, I began working on a problem that would be the topic of two independent research courses, a summer Research Experience for Undergraduates (REU) project and my Senior Honors Project. Working on this problem exposed me to mathematical research related to geographic information systems (GIS) and allowed me to make original contributions to this area. I found that GIS provided a great opportunity to expand and apply my mathematical knowledge. After graduating from WSU in 2016, I pursued my master's degree in Geospatial Information Sciences at the University of Texas at Dallas. The focus of my research was in spatial statistics.

The summer prior to graduating from UTD I pursued an internship so that I could get a sense for potential career paths incorporating both mathematics and GIS. This brought me to Travelers, where I was an intern in personal insurance. I worked on a project involving network analysis, optimization, and GIS. I found this to be a great application of my studies and hoped for a future career in this field once I graduated. It did. Upon graduation, I began my full-time career at Travelers.

I currently work as an analytics and research consultant for the Small Commercial Analytics business unit at Travelers. In this role, I build predictive models that provide project support, serving the small commercial multi-peril line of business.

In my current role, I assist in building pricing models for the Small Commercial Business Owner's Policies. Our primary goal is creating an insurance product that is more competitive through increased pricing segmentation. Much of my role involves building predictive models, along with various other data science and geospatial science supporting roles. This includes a significant amount of data manipulation (pre-modeling work) and implementation support (geospatial post-modeling work).

I find the entire modeling process fascinating. Before starting my career at Travelers, I never saw such a major modeling project in its full scope; there are so many working parts, so many different models being created, and so many factors that need to be accounted for. It's amazing how such complex mathematical work can be done in an efficient way, and from there, how it can be implemented in a ways to make positive, real life contributions in so many areas.

The biggest piece of advice I can give to someone is this: be curious. Always, always, always ask questions, continue to learn, and make mistakes (if it means you learn from them). Think about how you can make a positive impact on whatever you do, no matter how big or small. Having a natural curiosity along with bringing your own suggestions and ideas to the table will have an enormous, positive impact on your career.