STETSON PHYSICS FEATURED ALUMNI



Paul Stuk - Class of 2003

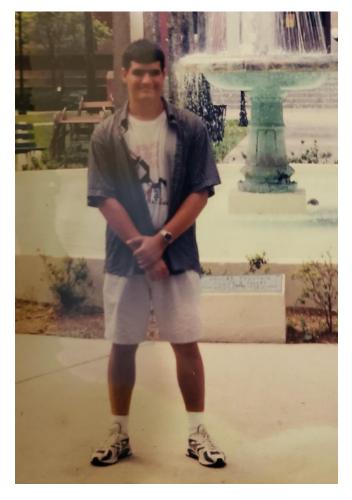
Paul and his family.

Back in high school when I was trying to plot my future, looking at colleges across the East Coast, I would never have imagined ending up in banking in Utah. Growing up in the suburbs of Atlanta, I was introduced to Stetson as a recruit for the Men's Crew Team. After a visit to campus in February, I was impressed by the warm weather, the beauty of the campus and friendliness of the students. In high school my favorite subjects had been Physics and Calculus, where I found each making the other easier to

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understand. As I continued along my educational path, I followed my interests and became a Physics major. I really enjoyed the enthusiasm of my professors, starting with Dr. Glander in University Physics. My favorite class was Modern Physics with Dr. Lick, where four of us met in a room surrounded by chalkboards and solved problems together. I have always enjoyed solving problems from multiple angles and enjoyed the elegance of Physics, since problems need to be solved mathematically and empirically to be understood. The small class sizes of Stetson allowed me to acquire knowledge in other departments such as statistics in the Business School and the Math department.

During 2002, the Mathematical Contest in Modeling covered a question on airline overbooking. During this weekend contest my team attempted multiple solutions and I was handed the



task of building a simulation model which was my first serious attempt at computer programming. This contest showed me that a varied skilled set can led to a myriad of the solutions. Dr. Glander helped me obtain a spot in the research for

Paul as a Stetson University undergraduate student.

undergraduates (REU) program at Montana State

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"I really enjoyed the University Ion Beam Laboratory. During this program I experienced life as experimental physicist and ended up with my only research citation ("Thermal stability of thin Ti films on Al single crystal surfaces"). While participating in the experiments was interesting, I was not as excited by the round the clock monitoring of equipment and numerous setbacks from equipment failing. I did enjoy the comparing the experimental output to the computer simulations.

- PAUL STUK

My summer research helped to focus my interest into applied mathematics aspects of Physics over experimental. I had always planned on graduate school, but this new focus broadened my view on what I might study. In the early 2000s, there had been growth in field of financial engineering which had been

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growing for the past decade and borrowed many techniques from Physics such as Stochastic Calculus. I ended up with a M.S. in Quantitative and Computational Finance from the Georgia Institute of Technology, which expanded on Statistics and Computer Science.

While finishing my degree at Georgia Tech, I started an internship at SunTrust Bank estimating losses from trading stocks, bonds, and derivatives. Traders there inherently understood normal probability, but they were uneasy around the fringe cases that I was modeling. A great model is worthless if it can't be explained. Throughout the course of my career, I have found well-explained and documented models were much more useful than technically more capable models. The skill I have most relied on has been writing with succinctness. I often think back to my senior research final article at Stetson where I wrote



Paul as a member of the Stetson University Crew Team.

paragraphs and then condensed them down to sentences.

As my career has progressed, I have always been happiest when learning something new which also allows for the utilization of old skills. In this time of

COVID-19, concise information transfer and collaboration — although always important — have risen to even greater significance.