

Trent McKinnon

Graduation Year: Senior

College: Business, Science

Major(s): Accounting, ACMS

Minors(s): NA

Scholar Group Membership: NA

Did you received other funding for this project?: No

Could you have completed this project without CUSE funding? No

More details on CUSE funding assistance? CUSE's funding was vital because without it, I would not have had access to the data required to complete the project. Further, while living in South Bend over the summer might not have necessarily been a requirement for my project because I could have in theory stayed at home and communicated via electronic means, being able to live so close to campus and have face to face meetings with ease was very useful. Because I lived next to campus I was able to physically show my adviser my work and have him make critiques about it in real time. There is no doubt that living in South Bend over the summer was a very important factor in my research process.

Project Title: The Value Line Enigma

Project Location: South Bend, Indiana. Notre Dame

ND Faculty Mentor: Michael Hemler

Project Type: Research, Creative Endeavor

Why did you undertake this project/experience? Deepen your knowledge of a topic or issue, Prepare for graduate school (MA or PhD), Career discernment and/or preparation

Did your funded experience help you:

[Deepen your understanding of your coursework or field of study]: Very Much

[Discern your interests and post-bac goals]: Very Much

[Become confident in your ability to set and achieve your goals]: Very Much

[Gain a more nuanced view of local, national, or global communities]: Not Applicable

[Improve your written and verbal communications skills]:Yes

Tell us about your experience.

My research in a nutshell is an investigation into a widely popular financial advisory company. Value Line has been making recommendations on various securities for over half a century, and in previous studies has been shown to have skill at making recommendations. This skill has been sustained for decades, something that lies in direct contradiction to the Nobel Prize winning idea of efficient markets. My research looks at the new recommendations that have been made over the past several years through the lens of various models to determine whether or not Value Line has been able to continue to produce excellent recommendations. Value Line makes recommendations on over a thousand unique stocks with recommendations changing every day. In essence my investigation was a deep dive into the world of big data. In

order to apply my financial knowledge to the problem I first had to become familiar with the tools used by academics when dealing with such a daunting dataset. Over the summer I, having no previous experience with it, taught myself SAS, a statistical programming language, along with some other languages such as SQL and C++. I also, with the help of my advisor, gained access and familiarity with WRDS(Wharton Research Data Services), the most widely used academic database in finance. I wrote programs that would take a query I would submit to WRDS, make some calculations, and transform the query into a massive usable database. I also wrote other programs to take this database and create hundreds of mockup portfolios based on a set of rules that programmed into it. As one would expect with any sufficiently complex problem, there were hiccups along the way. The biggest of which was the legality of the data. I did not realize that the library membership available to all students, might not allow the information to be used in academic studies presented at conferences or published. I also did not realize that the data was restricted past 3 years. However, thanks to CUSE's funding I am able to buy the data directly from the company. My adviser and I have been working on this problem with the help of Mendoza's stellar librarian Pete Pietraszewski for the past several weeks. We are still in negotiations with Value Line currently, but it looks like we will be able to acquire the data for a reasonable amount of money.

Describe the impact this project had, both on you as a student-scholar and on the people you worked with.

I learned so much over the course of this summer. Having never tackled such a large problem before I made quite a few mistakes. There were times where I honestly felt like banging my head on a wall, but that was an important part of the process. Before, I had a romanticized ideal of what research was supposed to be. Now, I know how much of a roller coaster ride it actually is from the lows of spending hours trying to debug a thousand line program, to the highs of watching that very same program run exactly as designed. As a student-scholar I am amazed at the complexity of the research that gets boiled down to less than a dozen pages in an academic article. I am very thankful that I had such a great adviser, Michael Hemler, to guide me through this now somewhat familiar but previously foreign process. Mike was the only person that I worked on this project with, and we would meet over lunch or at his office. He made some very helpful critiques of my work and also reassured me that this daunting project was within my ability.

Describe how this experience is connected to your plans as a student or future professional.

Eventually when all the paperwork goes through to acquire the data, Mike and I hope to present at a conference and or publish in an academic journal. This summer has been enlightening for me because while before I was somewhat sure that I would want to get a Ph.D in Finance, now I am entirely certain that I want to pursue this career. I loved the process. Well, if I'm being honest I hated it at times, but the good massively outweighed the bad. In regards to future plans, this experience will be extremely helpful when it comes to graduate admissions.

What advice would you give other students who are planning to pursue similar projects?

Organization is paramount. I learned early in the summer that attempting to go from A to Z without mapping out all the steps needed to get there was a grave mistake. I would suggest taking the Elon Musk approach and break down your big project into what he calls “first principles”. Start with your end goal in mind, then break it down into smaller pieces, then segment those pieces into even smaller chunks. Rinse and repeat until you eventually have small very manageable objectives that will eventually lead you to your goal. Also, make as many objectives independent as possible and make them verifiable so that if something goes wrong down the line-which it likely will-you will be able to efficiently identify the problem.

I acknowledge that this form has been filled out truthfully and to the best of my ability. I understand that this information will be shared with many different CUSE constituencies. As such, I have provided as much useful information as I was able. I understand that CUSE will not complete my award disbursement until this form is successfully completed. If I have any questions or concerns, I will contact CUSE before submitting this form. To illustrate that you understand all of these points, please enter your Notre Dame email in the box below.
tmckinno@nd.edu
