



## Ryan Haskett Interview



**Ryan Haskett is a mathematician and finance professional and currently about halfway through a year of extreme vagrancy. He and his partner have just finished an RV tour of the Rocky Mountains and are off with backpacks to Europe and North Africa.**

**Diaz-Lopez:** *When/how did you know you wanted to be a mathematician?*

**Haskett:** That is a hard question for me. I'm not sure I remember a time when I wasn't interested in math or computer science. Games were the early draw for understanding computers, as in those days often a good amount of expertise was required just to get games working on a PC.

In math, maybe the draw was orderliness. I like how systems work together. Also, at my college (at the time) the professors of mathematics were much more engaging than the professors of computer science.

**Diaz-Lopez:** Who encouraged or inspired you (mathematically or otherwise)?

**Haskett:** My parents for sure. I had good high school teachers who were very supportive and many college professors who took the teaching aspect of their jobs very seriously. My PhD advisor was instrumental in keeping me in grad school.

**Diaz-Lopez:** *How would you describe your work to a graduate student?*

**Haskett:** I'm currently taking a career break and traveling, but let me talk about my last job. My main goal was to build a system that would minimize the effects of random currency price spikes on our global portfolio of investments, at a reasonable cost. Building and improving this semi-automated system kept me fairly busy but also left time to explore some research questions for the firm. For instance, what are metrics to judge whether a hedge fund was good, or just lucky? Or, how do you understand the interactions between really long-term investments, like private equity, and more-common financial investments, like stocks and bonds?

I mainly use linear algebra and scientific computing and little else to directly justify all the differential equations and asymptotics I studied in graduate school. Still, my time as a grad student taught me how to work with messy data sets and also apply results from academic papers, even from other fields. These skills have been extremely useful in finance.

**Diaz-Lopez:** *You finished your PhD, and shortly afterward you started working in the financial sector. What message would you give to doctoral students and professional mathematicians thinking about having a career in this sector?*

**Haskett:** The first thing to note is just how easy the transition was. I had taken only one economics class during college and grad school combined, but companies were more than willing to help to get more employees with strong mathematical backgrounds. The Chartered Financial Analyst (CFA) program was useful as well, and most companies will cover the fees. The CFA designation is billed as an entry to a community of financial professionals. However, the financial community seems to think of it as a series of three hard tests that are meant to create a class of people who passed, versus a class who did not. That sounds fairly awful, but what the CFA does exceptionally well is assemble the whole background one needs to

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really get into finance and a series of tests to make sure you learn it thoroughly.

To answer your question: obviously, the salaries are fairly exceptional, but the big draw for me was the time-frame of projects. In grad school, projects took years, and I would often get bored working on the same thing for that long. In finance, projects usually take weeks to months, which is enough time to really dive into an area, but not too long to make it tedious. Also, the feedback on your work tends to be fast and numerically obvious.

**Diaz-Lopez:** All mathematicians feel discouraged occasionally. How do you deal with discouragement?

**Haskett:** This seems unrelated, but regular exercise and sufficient sleep seem to make the real difference between those who succeed and those who don't, both as grad students and professionals. It works wonders for people's mental states. A lot of research has come out recently showing the variety of benefits from both.

**Diaz-Lopez:** *If you were not a mathematician, what would you be?*

**Haskett:** Computer programmer for sure, probably in the Valley.

**Diaz-Lopez:** *If you could recommend one lecture (book, paper, article, etc.) to graduate students, what would it be?*

**Haskett:** For fun, I love the "Crash Course World History" lecture series on YouTube.

## Photo Credit

Photo of Ryan Haskett is courtesy of Ryan Haskett.

## Looking Back on a Year of Interviews

The Graduate Student Section was launched with the January 2017 issue of the *Notices*. Since then, each installment of the section has included an interview with a mathematician. Below is a list of the Graduate Student Section interviews that have appeared to date.

Comments and suggestions for future interviews are welcome. Please post comments on the *Notices* website at [www.ams.org/notices](http://www.ams.org/notices). Please send suggestions for interviews, or for other topics you would like to see covered in the Graduate Student Section, to [noti-gradsec@ams.org](mailto:noti-gradsec@ams.org).

January 2016: Ian Agol

February 2016: Fernando Codá Marques

March 2016: Elisenda Grigsby

April 2016: Arlie Petters

May 2016: Melanie Wood

June/July 2016: Jordan Ellenberg

August 2016: Helen Moore

September 2016: Po-Shen Loh

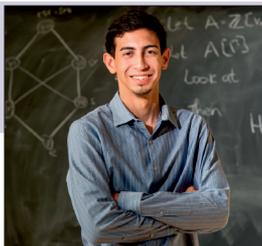
October 2016: Timothy Gowers

November 2016: Colin Adams

December 2016: Gigliola Staffilani

January 2017: Arthur Benjamin

February 2017: Tom Grandine



**Alexander Diaz-Lopez**, having earned his PhD at the University of Notre Dame, is now visiting assistant professor at Swarthmore College. Diaz-Lopez was the first graduate student member of the *Notices* Editorial Board.