Getting Into the Field: The Journey of an Operations Analyst

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Who Am I?

- Mathematician, operations researcher, (former) musician
- B.S. Mathematics, Texas A&M University - San Antonio (2015)
- M.S. Applied/Industrial Mathematics, University of Texas at San Antonio (2024)
- Also studied briefly at Texas A&M University

Figure: Digital portrait by Bee Criswell.
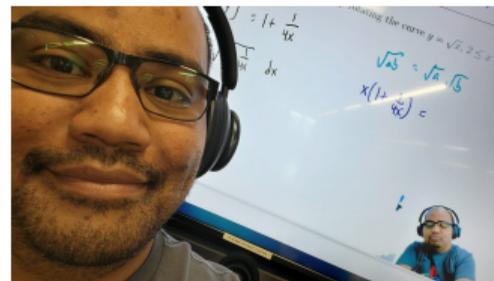
Experiences in Undergrad

- Two independent study courses as a senior (one paper available on my website!):
    - *Concrete Mathematics*, Donald Knuth, Oren Patashnik, Ronald Graham
    - *Vector Calculus, Linear Algebra, and Differential Forms*, John Hubbard and Barbara Burke Hubbard
- Earned a teaching certificate, Math 7-12
- Part of TAMUSA Math Club

Grad School

- Data science training began with MAT 5153 - Methods in Data Analytics (then a special topics course)
- Continued to read on basics of machine learning, supported with courses
- Lots of outreach via ACM UTSA!
- Developed soft skills through MGT courses

The Grad TA Experience

- Served as a MAT 1224 (now 1223) TA for six semesters (four long plus two summers)
- Recitation library created (still on the department's YouTube page!)
- Focused on student-facing hours and skill improvement

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The Job Search

- Finding technical jobs proved difficult, especially with the rise in data science
- Most positions were extremely competitive, with most applications not receiving interviews or consideration
- Government positions seemed promising[1] with connections and networking
- The save came from the Palace Acquire Program, a development program for recent graduates

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[1]Given the climate at the time.

The Day-to-Day

- Many projects involve dashboarding to create visuals, guiding decisions in pilot training
- Lots of talk with different stakeholders from different backgrounds
- Weekly professional development to share expertise across the office

Things I Wish I Knew!

Some words of advice from around the office:

- Advertise your skillset
- Learn the soft skills!
- Networking is key
- Diversify your skillset
- The pace of work varies
- Ask questions!
- Tailor your resumé to the position!

Get in Touch

Best to reach me through email: `sean.roberson.5@us.af.mil`. More contact and other information on my website: `https://szroberson.github.io`