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GEORGE GRANBERRY

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EMPLOYMENT

Student Technician — **Emory University** — **Winter 2011 – Summer 2014**

Student Technology Services

- Worked directly with University Students on any issues they were having with their computers.
- Developed both hardware and software troubleshooting skills across a large variety of machines.
- Wrote an android application to replace all the manual paperwork and data entry.

Software Engineering Intern — **Qualys** — **Summer 2012**

- Created ANT build scripts.
- Wrote a C# cron job for generating various types of Windows logs.
- Wrote a basic website for our engineers to visualize the logs being generated.
- Wrote a small perl library for running Regular Expressions on their logs.

Software Engineering Intern — **Amazon** — **Summer 2013**

- Created a system for indexing GIT objects in Amazon Cloud Search.
- Learned the basics of AWS servers and how to leverage the computation power of EC2 and flexibility of S3 buckets.
- Created a complimentary Ruby on Rails sight for viewing the indexed search items.

Senior Software Engineer — **IBM** — **May 2014 – August 2018**

Junior Software Engineer

- Inherited the Identity Management and Authentication systems with a small team of 3 engineers.
- Worked 24/7 high demand Java/Groovy servers that backed the biggest streaming events of the year.
- Developed a suite of python scripts to crawl through all streaming assets and monitor their state.

Senior Software Engineer (2016)

- Greatly expanded the testing infrastructure and philosophy for our system.
- Active role in choosing and designing new microservices in our ecosystem.
- Broke our system down into containerized microservices.
- Implemented a Kubernetes ecosystem using Helm.
- Developed a CI/CD pipeline for our services to completely automate our development cycle.

Software Engineer **Disney Streaming Services**
August 2018-present

- Devops Engineering space
- Writing AWS Stepfunctions and Lambdas to automate application Deployment across all of Disney Streaming

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Atlanta, GA **Emory University** **Fall 2010 – May 2014**

- B.S. in Computer Science, May 2014.
- B.A. in History, May 2014.
- GPA: 3.7

- **Languages and Technologies**

- Java; Groovy; Haskell; Python; SQL; Golang;

Category Theory Background: My only real background in Category Theory is reading through *Category Theory for Programmers*. I know Haskell and have used the lens project

Expected PhD Completion: Haven't gone back for my PhD yet. I'm still in the industry for now, but I plan on going back to school for some combination of Category Theory and Computing at some point.

Project Preference

1. Traversal Optics and Profunctors
2. Partial Evaluations
3. Complexity Classes
4. ZX Calculus
5. Autopoiesis
6. Dialogue

Oxford Availability: I should almost certainly be able to go and can fund my own stay.

Interest in ACT2019: While I'm not currently a researcher or student, I've always wanted to become active in the research community and contribute to a community dedicated to pushing boundaries. I knew as soon as I started reading about Category Theory that it was the subject I wanted to contribute to and eventually go back to school to get my PhD in. But as of right now, the only real way I can think of to get involved is to read blog posts and research papers on my own. While reading on my own is interesting, I feel that I'm missing out on how much peers and mentorship has to offer, and I'd love to contribute my own viewpoints as well. ACT2019 seems like the perfect opportunity for me to take a step forward into the community.

More specifically, the research topics presented by ACT2019 are especially interesting to me as they are all outlets into applying Category Theory to the real world. I've been reading more and more, but I haven't had a chance to embed the concepts of what I've learned into any projects yet. Working on a research topic like the profunctor optics and contributing to the Haskell lens library would not only be an application to something that gets used in the real world, it would be work on a library that I use all time.