



# Michael Engen

Full-Stack Software Developer

[in/michael-engen](https://in/michael-engen) 

[michaelengen.com](https://michaelengen.com) 

[resume@michaelengen.com](mailto:resume@michaelengen.com) 

## SUMMARY

I am a software developer skilled in full-stack development, technical writing, and scientific programming. Passionate about helping others through technology, I've built end-to-end testing tools, crafted extensive documentation, and worked directly with developers to identify product improvements. I value communication highly and have great experience presenting technical content, including six years of teaching experience, multiple published research papers, and presentations to technical and non-technical audiences.

## EXPERIENCE

### Integration Engineer III

2021 – Present

PayPal, remote

- Designed and developed full-stack application with Flask and Javascript for configuring and testing REST APIs in conjunction with frontend SDKs
- Crafted extensive technical documentation and sample code for new product features to accelerate product adoption
- Gathered product and documentation feedback by collaborating directly with external developers

### Software Engineer

2020 – 2021

Bridgerock Data

- Created, managed, and migrated PostgreSQL databases in a data lake architecture
- Identified external stakeholders' business-intelligence needs and produced custom SQL-powered reports for analyzing key performance indicators
- Implemented a new database and computing infrastructure using Docker, shell, and AWS
- Collaborated in an agile development environment and gained experience in a fast-paced startup

### Software Developer

2018 – 2020

University of Florida

- Developed an open-source online learning platform for mathematics instructors
- Worked directly with users to collect and implement product feedback

### Chateaubriand Research Fellow

Fall 2019

Université Paris 13

- Wrote successful application for a research collaboration with French computer scientists
- Conducted novel mathematical research in a multicultural environment

### NSF Mathematical Sciences Graduate Intern

Summer 2017

Oak Ridge National Laboratory

- Developed a graph mining algorithm as a method of natural language feature selection for machine learning classification project

## EDUCATION

### Doctor of Philosophy in Mathematics

2017 – 2021

University of Florida, focus: discrete mathematics

### Master of Science in Mathematics

2015 – 2017

University of Florida, focus: discrete mathematics

### Bachelor of Science in Mathematics

2013 – 2015

University of Florida