

# Samuel Mercier

2809 Covington St. – West Lafayette, IN 47906

✉ smercier@purdue.edu • 🌐 samercier.com • 📧 samontea

## Education

**Purdue University (College of Science, Honors College)** **West Lafayette, IN**  
*B.S. in Mathematics, Minor: Computer Science, Philosophy* *December 2019*  
*Relevant Course Work* CS 381 *Intro to Algorithm Analysis*, CS 252 *Systems Programming*, STAT 416 *Probability*, MA 454 *Galois Theory*, MA 572 *Algebraic Topology*, MA 553 *Algebra*  
**Awards:** Purdue Presidential Scholarship & Purdue Marquis Scholarship *Fall 2015–Present*  
**Honors:** Dean's List *5 of 6 semesters*

## Work Experience – Software Engineering

Technical Experience – *Programming Languages/Frameworks*

o Proficient: C/C++ & JavaScript o Familiar: Elixir, Emacs Lisp, Java, Python, & Ruby

**Software Engineer Intern** MongoDB *May 2018–August 2018*

Working on the query language & database management system. Implemented part of a new index type.

*Technologies:* C++, Python (for testing), & JavaScript (for testing).

**Software Engineer Intern** MongoDB *May 2017–August 2017*

Researched and implemented time series analysis techniques for anomaly detection for their “DaaS” platform. Integrated into existing alerts framework to create automated anomaly detection alerts.

*Technologies:* Java & MongoDB.

**Web Development Intern in Support of NASA Systems Engineering** NASA JSC *January 2017–May 2017*

Developed requirement management software used throughout NASA.

*Technologies:* JavaScript, Node, Angular 1.x, Brunch, & Redux.

**Software Engineer Intern Fullstack** Springbuk *June 2016–August 2016*

As an intern project, led development on an onboarding application for new customers. Worked as a normal software engineer on their Rails web application. Improved frontend/backend communication.

*Technologies:* PostgreSQL with ActiveRecord as a wrapper, Ruby, Ruby on Rails, & JQuery.

## Work Experience – Teaching

**MA 161/162 Undergraduate Teaching Assistant** *August 2018–Present*

Answer questions with students in “flipped classroom” for MA 161/162 (Calculus I/II).

**CS 252 Undergraduate Teaching Assistant** *January 2018–May 2018 & August 2018–Present*

Assist in teaching CS 252 *Systems Programming* in weekly lab classes & preparing materials (labs, exams, etc.)

**CS 240 Undergraduate Teaching Assistant** *January 2016–May 2016 & August 2016–December 2016*

Assist in teaching CS 240 *Programming in C* in weekly lab classes & preparing materials (labs, exams, etc.)

**CS USB Help Room Tutor** *September 2015–December 2015*

Tutored in CS 180 *Object-Oriented Programming* & CS 240 *Programming in C*.

## Other Experience

**BoilerMake Hackathon Executive Board** (Dev & User Experience Team) *January 2016–October 2018*

Helped plan and organize anything relating to resources/services for the event participants. Made a small NodeJS application with a bunch of puzzles. <https://github.com/BoilerMake/puzzles-BM4>

**Purdue FIRST Programs** (IT Team) *August 2015–December 2016*

IT Director *May 2016–December 2016*

Led development of a home brewed content management system.

*Technologies:* Docker, Elixir, Phoenix, Postgres, React, & Redux.