

Samuel Mercier

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Education

Purdue University (College of Science, Honors College)

B.S. in Mathematics, Minor: Computer Science, Philosophy

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

Honors: Dean's List

West Lafayette, IN

December 2019

Fall 2015–Present

5 of 6 semesters

Technical Experience

Programming Languages/Frameworks

o Proficient: C/C++ & JavaScript

o Familiar: Elixir, Emacs Lisp, Java, Python, & Ruby

Work Experience – Software Engineering

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.