

# Joseph Barr

✉: me@josephmbarr.com | /in: JosephMBarr | : josephmbarr.com

## EDUCATION

### PURDUE UNIVERSITY

BS, COMPUTER SCIENCE

BS, APPLIED MATHEMATICS

GPA: 3.94/4.00

Graduation: May 2021

## SKILLS

### TECHNICAL

proficient in:

z/OS • JCL • Angular • Javascript •  
Node.js • HTML/CSS •  
Linux • C/C++ • Python • SQL •

### OTHER

Agile Development • Unit Testing  
• Organization • Optimization •  
Discipline •

## COURSEWORK

- Object Oriented Programming (Java)
- Discrete Mathematics
- Programming in C
- Computer Architecture
- Data Structures and Algorithms
- Software Engineering I
- Systems Programming
- Information Systems
- Operating Systems
- Software Testing
- Analysis of Algorithms
- Relational Database Systems
- Computer Networks
- Software Engineering Senior Project

## ACTIVITIES

- Purdue Political Discourse Club - Officer (Webmaster) (Jan. 2019 - Present)
- Purdue College of Science Ambassador (Jan. 2018 - Present) [Student Lead, May 2020 - Present]

## PROFESSIONAL EXPERIENCE

### IBM | z/OS DEVELOPMENT INTERN

June 2020 – December 2020 | Rochester, MN

- Developed and tested internal z/OS mainframe software (JES2 Policy), primarily leveraging z/Architecture (assembly) and JCL.

### BATESVILLE CASKET CO. | TECHNOLOGY SOLUTIONS INTERN

May 2019 – May 2020 | Batesville, IN

- Engineered Angular web app and unit tests, synthesized requirements and feedback, coordinated with team in Agile framework.
- Summer internship was extended to yearlong part-time opportunity.

### HILLENBRAND INC. | IT INTERN

May - Aug. 2018 | Batesville, IN

- Developed software for monitoring and managing enterprise databases, evaluated and initiated asset management and virtualization solutions, coordinated goals and progress with coworkers.

### PURDUE UNIVERSITY | TEACHING ASSISTANT

Jan. 2018 - Present | West Lafayette, IN

- Manage lab sections, facilitate students' work in programming courses, and coordinate assignment grading.
- Python programming (2 semesters), C programming (3 sem.), Systems Programming (1 sem.)

### PURDUE UNIVERSITY | COSINE MATH TUTOR

Aug. 2017 - Present | West Lafayette, IN

### KROGER | CASHIER

Jul. 2014 - Aug. 2017 | Batesville, IN

## PROJECTS

### PURDUEPDC.ORG | FULL-STACK WEB DEVELOPMENT

Feb. 2019 – Present

- As webmaster, built and continue to maintain homepage for Purdue's Political Discourse Club.
- Implemented Firebase back-end and Angular Material front-end.
- Includes user authentication and custom content management system.

### A.O | CHROME EXTENSION

Nov. 2014 – May 2017

- Provides statistical and graphical insight into one's grades on Powerschool. Conceptualized improvements to user interface of Powerschool concerning precision of grades, visualizing trends, and changes over time.
- Implemented changes to interface through utilization of Javascript and CSS to increase knowledge of academic performance. Distributed plugin via Chrome Web Store, achieving 1,000+ installations across the country.

### OFFICIUM | WEB APP

Jan. – Apr. 2019

- In collaboration with 5 other students, implemented a web app that facilitates management and evaluation of job applications for Software Engineering I.
- Leveraged Firebase for back-end and React for front-end.