

## Karl Gaertner

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**Experience In:** Java, C, C++, Python, JavaScript, ARM assembly, Firebase

### Education

Purdue University – West Lafayette, IN December 2020

- **Bachelor of Science:** Major in Computer Science  
Minor in Mathematics

- **Courses:**

- Software Engineering
- Computer Architecture
- Data Structures and Algorithms
- Linear Algebra
- Entrepreneurship and Innovation
- Systems Programming

- **Current Clubs:**

- SIGAI
- Purdue Hackers
- Web Development Club

- **GPA:** 3.95/4.00

Libertyville High School - Libertyville, IL May 2017

- **GPA:** 4.38/4.00

### Experience Through Clubs

#### Coding Cats

2016 - 2017

- Participated in hackathons to develop coding skills and explore new areas of coding while working with other people

#### Math Team

2013 – 2017

- Competed and prepared for several math competitions by studying past exams while also writing calculator programs and constructing formulas and shortcuts based off patterns in similar problems
- Illinois Council of Teachers in Mathematics
  - State Champion (2015 - 2017)
- Illinois Math League
  - Individual runner-up (2017)

### Personal Projects

- **Court Sort** – A web app which uses node.js to connect to Firebase's database. This app allows users to rate their meals, create groups to plan meals, and receive predictions for the dining court where they should eat.
- **Photo Calendar** – A python program that can use a photo of a poster or flyer for an event and store the date, time, location, and event in your Google Calendar.
- **Bid-Tac-Toe** – A Tic-Tac-Toe app for Android where users bid against each other in a ten second interval for the right to place their symbol in the grid.
- **Chrome Extensions** – Programs that eased common tasks while allowing me to learn about JavaScript and HTML
- **Neural network** – A project to introduce me to machine learning and apply my knowledge learned in linear algebra

### Work Experience

- **Undergraduate Teaching Assistant at Purdue University** 2019 - Current
  - Guide students through their problems in lab
- **Amazon Warehouse Employee** 2018
  - Sorted and stowed packages in a high pressure, fast paced environment.
- **Referee for Greater Libertyville Soccer Association** 2011 - 2016
  - Managed the game as a center and assistant referee to enforce the rules while keeping players safe
  - Advised and evaluated junior referees as a supervisor to help them learn how to better ref their games