

Saim Zafar

saimzafar.io · [/saimzafar](https://github.com/saimzafar) · saimzafar2002@gmail.com · [in/saimzafar](https://in.linkedin.com/in/saimzafar)

Skills

- Python, C, Java, JavaScript and MySQL
- Experienced in using SQLite, PyCharm, Atom and Visual Studio Code

Licenses and certifications

[Python for Everybody \(Specialization\)](#) – Coursera, University of Michigan

Oct 2021

- Learned SQL and database design for storing data as part of a multi-step data gathering, analysing, and processing effort.
- Learned how to build web crawlers and multi-step data gathering processes.
- Learned how to scrape, parse, and read web data as well as access data using web APIs.
- Explored the use of Python built-in data structures such as lists, dictionaries, and tuples.
- Implemented HTML, XML, and JSON data formats in python.
- Used the Google maps API as well as the Twitter API for the specialization.

[Algorithm Toolbox](#) – Coursera, University of California San Diego

Jan 2022

- Implemented algorithms regarding divide and conquer, greedy algorithms, dynamic programming.

[Mathematical Thinking in Computer Science \(Honours\)](#) – Coursera, University of California San Diego

Sept 2021

- Understood the role and implementation of induction, recursion, logic, invariants and optimality in Computer Science.

Projects

[Internet Crawler](#) – Python, SQL, and JSON

- Browsed the internet using an initial point given by the user and retrieved a given number of pages and stores them.
- Ranked the pages in the database using the number of inter linked websites as a reference.
- Visualized the data using a json file with the help of this [web design](#).

[Google maps API](#) – Python, SQL, and JSON

- Used the Google geocoding API to find the correct location of some user-entered geographic locations.
- We save these geographic locations into a SQL database.
- Converts data into a json file which is used for [visualization](#).

[Visualizing data from gmane.org](#) – Python, SQL, and JSON

- Crawlers though the data provides by gmane.org and [visualizes](#) it in several different ways.

[Basic Use of Twitter API](#) – Python, SQL

- Uses the twitter API to spider through the given twitter account and find all of its connections and print them.

Volunteer Experience

- [Pegasus](#) - I have volunteered to organize an inter-college event at my college in 2016 by the name Pegasus.
- [Cancer Aid Society](#) - I had volunteered with the Cancer Aid Society of India and helped them with a fundraiser at my school.

Education

University of Waterloo - Bachelor of Honours Mathematics (with co-op)

Jan 2021 - Present

La Martiniere College, Lucknow - Completed ISC Board Examination (with 93.25 percent)

April 2006 - July 2020