

AAYUSH MAKHARIA

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EDUCATION

University of Illinois at Chicago

January 2021 - December 2022

Master of Science in Computer Science (3.4/4.0)

Relevant Coursework: Data Science, Development of Mobile Apps, Database System and Object-Oriented Language and Environments.

Mumbai University

August 2016 - October 2020

Bachelor of Engineering in Information Technology

Relevant Coursework: Data Structures and Analysis, Advanced Data Structures, Web Development and Cloud Computing.

PROFESSIONAL EXPERIENCE

Graduate Teaching Assistant

August 2021- August 2022

Database Systems

- Teaching and Assessment of activities for the delivery of the subject to the Graduate and Undergraduate students.
- Developed a CRUD based project with registration, login, and logout having 5 attributes and 100+ data entries each.
- Collaborating with the faculty to conceptualize new assignments and refine the coursework to provide better understanding of the subject to the students.
- Leading and mentoring teams of students (45 teams) with their project and reviewing their work as a customer of their product to make it deployable in the market.

SOFTWARE SKILLS

OS: Mac OS, Windows, and Android.

Programming Language: Java, JavaScript, C#, and Python

Technologies: EC2, S3, DynamoDB, MySQL, Oracle, and MongoDB.

Web Technologies: HTML, PHP, and CSS

INDIVIDUAL PROJECTS

Covid Medical Lab Testing

February 2022 - May 2022

Principle of Concurrent Programming

- Implemented a management utility to track tests and the results to provide an update on these tests whenever needed
- Using Multithreading we can access the tests across multiple labs and multiple testing sites we can tests bifurcated based on the results as well as we can have a dynamic testing site.
- Improved functionality of the testing by using locks which helped in Multithreading thus maintaining safety and liveness

Java Interpreter

October 2021 - November 2021

Object Oriented Languages and Environments

- Developed an Interpreter for Java source code as an Object using Java Parser Library in Java environment for interaction.
- Interpreted Java into a Python project implementing operation like binary, comparison, conditional, function invocation, sequencing, loop, and return.
- Java Parser Library is used to interpret and evaluate Abstract Syntax Tree of the Java Class, Objects and Method Calls.
- Implementation focused on the difference between lexical and dynamic scoping across different language.

Library Database System

March 2021 - April 2021

Database Systems

- Designed and developed a CRUD application on library data and implemented RESTful API service for the application
- Incorporated functionalities to Login, Register and Logout which would restrict the activity to authorized users.
- Implementation of the project resulted in database consisting of 1000 books across three locations and had 75 users.

Spotify Data Analysis

February 2021 - April 2021

Introduction to Data Science

- Analysis of "Spotify" using web scrapping modules and "Spotipy", a lightweight python library for Spotify Web API.
- Data Analysis for gaining insights and patterns was performed on regional charts of India, UK, and USA during the COVID-19 Lockdown by extracting data and features.
- Data consisted of nearly 30,000 data points which was spread across 17 rows and consolidated for three regions.