CHRIS SERRAO

cserrao@umass.edu • www.linkedin.com/in/chris-serrao-64360a199/ • (617)909-7328
Website: uvrays123.github.io/website/

EDUCATION

University of Massachusetts Amherst, *Amherst, MA*
Sept 19 - Present
B.S. in Computer Science, GPA: 3.96/4
Relevant Courses: Introduction to Problem Solving with Computers, Programming with Data Structures, Programming Methodologies, Introduction to Computation and Discrete Mathematics, Calculus, Multivariate Calculus, Computer Systems Principles, Linear Algebra

WORK EXPERIENCE

ApTSi   *Dec 20-Present*
- Built the update capability for the ApTSi code requests to automate data updates in CouchDB (No-SQL database)
- Built the interface for processing a query request and doing various CRUD commands on MinIO
- Working in the Master Data Management Team to build an MDM model to communicate between various databases such as CouchDB, MinIO, PostgreSQL using stream management software such as Apache Kafka.

RESEARCH EXPERIENCE

UMass URV   *June 21-Present*
- Built a Learned Cuckoo Filter which uses a pre-filter to a normal cuckoo filter to make it more space efficient.
- Used ML Forest Classifier as a pre-filter to reduce space usage of a normal cuckoo filter.
- Cuckoo Filter works on a dataset about phishing URL's and predicts if the URL is present in the database.

TECHNICAL PROJECTS

Twitter Kafka Data Streams   *July 21-Aug 21*
- Built a stream management platform using Java which fetches real-time data from the Twitter API using a Kafka Producer.
- The obtained real-time twitter data is fed into Elasticsearch to display efficient data transfer using a Java Kafka Consumer.
- The Project can be accessed here: https://github.com/uvrays123/Twitter-Kafka

Youtube- Clone   *Aug 20-Sept 20*
- Built a Youtube clone using the Youtube public API.
- The designing of the project is done in React. This project is linked to the API in the back-end using AJAX.
- The Project can be accessed here: https://github.com/uvrays123/youtube-clone
- The Demo of the Project can be accessed at: https://uvrays123.github.io/youtube-clone/

Tic Tac Toe AI   *June 20-July 20*
- Built a Tic Tac Toe game using the Minimax Algorithm.
- Tic Tac Toe computer algorithm also uses Alpha-Beta pruning to improve efficiency. It is built using React.
- The Project can be accessed here: https://github.com/uvrays123/Tic-Tac-Toe-AI
- The Demo of the Project can be accessed at: https://uvrays123.github.io/Tic-Tac-Toe-AI/

Forkify- A Recipe Finder   *May 20-June 20*
- This recipe finder application uses API's as a database for all the recipes.
- It is built using HTML, CSS, Modern JavaScript and AJAX. It displays recipes according to a user's search.
- It also has features such as favorites and shopping list which are saved for the user's next visit.
- The Project can be accessed here: https://github.com/uvrays123/Forkify-Recipe-Finder
- The Demo video of the Project can be seen on my website: https://uvrays123.github.io/website/

SKILLS

Technical: Java, HTML, CSS, JavaScript, React, AJAX, C, Octave, Python
Databases: CouchDB, MinIO, PostgreSQL
Frameworks: Apache Kafka
Extracurricular: Music (3rd Grade Theory and 1st Grade Practical from Trinity College of London in Piano), Swimming