

DARSHAK DEEPAN RAIRAKHIA

Dallas, TX . (682)-556-2681 . darshakrairakhia123@gmail.com . <https://www.linkedin.com/in/darshak-rairakhia/> . <https://agitated-knuth-db3679.netlify.app/>

SUMMARY

Analytical and Motivated Software Engineer professional with academic and technical expertise in Web Development, Data Mining, Operating Systems, and Machine Learning. Seeking full-time opportunities as a software engineer or a full-stack developer.

WORK EXPERIENCE

Software Engineer, *University of Texas at Arlington*

June 2020 - Present

- Created a Software testing tool to generate Single Fault Failures for logical expressions using **Java**.
- Responsible for adding CRUD functionalities to a Web application which provides service of education for virtual education.
- Developed, maintained, and enhanced code using best practices in software engineering.
- The tech stack used to build this application is **Php** and **Laravel** with a **SQL** database and **React** for front-end.

Research Assistant, *KJSCE*

July 2017 – June 2018

- Responsible for developing a software for an embedded system using **Arduino** as a development environment.
- Enhanced programming and object-oriented skills in **C++** and in Computer networks including TCP/IP and **HTTP** protocols.
- Implemented region-based image segmentation to help collaborate with object detection using **Python**.

Web Developer, *Nelco Ltd.*

April 2015 – July 2015

- Designed a Web Interface to get the subscription data from the clients of the VSAT technology team.
- Frontend was developed using **JavaScript** while backend was implemented using **Php** with a **MySQL** database.
- Implemented python script to send thousands of emails to the clients that are subscribed to receive VSAT services.

ACADEMIC PROJECTS <https://github.com/Darshak1997>

Todoist Clone using React <https://github.com/Darshak1997/ToDoist-Clone>

October 2020

- Created the popular Todoist application from scratch using **React** (Custom Hooks, Context) and SCSS for styling.
- Worked with **Firebase** to store the data and testing was achieved using React testing Library (Unit and Integration testing).

URL Shortener <https://github.com/Darshak1997/url-shortener>

September 2020

- Given any URL, this system shortens and returns a globally unique alias of that URL back to the user.
- Used **Node.js** for backend, **React.js** for frontend, **MongoDB** to store the URLs, and **Redis** to cache the shortened URLs.
- Using LRU caching policy, this system can save a lot of read operations to the database making the system faster.

Campgrounds Website <https://github.com/Darshak1997/WebDevelopment>

June 2020

- Built a full-stack application called Yelp Camp. The technologies used are **HTML/CSS**, **JavaScript** and **Node.js**.
- All the campgrounds and comments on a post has CRUD operations with access control.
- Routing is achieved using **RESTful** APIs and the database used for storing is **MongoDB**. Used Passport.js for authentication.

Chat Application <https://github.com/Darshak1997/Chat-Application>

March 2020

- Exploring Multi-Threading and socket module by creating a chat application with a single server and 7 clients using **Python**.
- Clients can either unicast the message, multicast it, or broadcast the message by posting messages on the tkinter GUI.

Movie Search Engine <https://movie-mining-engine.herokuapp.com/>

November 2019

- Built a full-stack application that used **Python** for backend, **JavaScript** for frontend and **Flask** for communication.
- Phase 1 involves text-search that searches for movies using the tf-idf algorithm to rank top 10 movies to a given user query.
- Phase 2 contains Genre Classification of the movie with respect to a user query. Page load time of an average of 3 seconds.

EDUCATION

- **University of Texas at Arlington**, Arlington, Texas
MS in Computer Science and Engineering

May 2020

GPA: 3.5

Coursework: Software Testing, Machine Learning, Distributed Systems, Analysis of Algorithms, and Web Data Management.

- **Mumbai University**, Mumbai, India

June 2018

Bachelor of Technology in Electronics Engineering

SKILL SET

Languages/Systems: Python, C/C++, Java, JavaScript, C#(.Net), Shell Scripting, MySQL, Apache Kafka.

Web Technologies: HTML5/CSS3, PHP, Laravel, Node.js, ExpressJS, jQuery, RESTful, React, ASP.NET Core.

Data Science: NumPy, Pandas, Matplotlib, Scikit Learn, TensorFlow, NLTK.

Databases: SQL, MongoDB, Redis, Firebase

Tools: Jupyter Notebook, Spyder, Eclipse (Junit, JaCoCo), Atom, PyCharm, Visual Studio Code.

Platforms: Ubuntu, Windows, Arduino, Rasberry Pi.

ACTIVITIES

- Participated in Hackathon and built a movie recommendation website where our team was placed among the top 5 teams.