

Abhilasha Saini

asaini4@ncsu.edu | www.linkedin.com/in/abhilasha-saini-370596131/ | (385)216-0469

EDUCATION

North Carolina State University, United States

August 2018 - May 2020

Master of Computer Science

Courses: Object Oriented Design & Development, Operating Systems, Design and Analysis of Algorithms, Foundations of Data Science, Privacy

Maharshi Dayanand University, Rohtak, India

August 2014 - May 2018

Bachelor of Technology in Computer Science & Engineering | GPA: 3.7/4.0

Courses: Database Management Systems, Data Structures, Web Development, Principles of Software Engineering

SKILLS

Languages: Java, C++, C, Python, Ruby, R

Web Technologies: HTML, CSS, JavaScript

Databases: MySQL, Firebase, PostgreSQL

Frameworks: Ruby On Rails

Tools: Git, Heroku, Tableau

INTERNSHIP & TECHNICAL EXPERIENCE

Medic Creations Pvt Ltd. | Java, Android, Firebase

Gurugram, India

Software Development Intern

February 2018 - May 2018

- Designed an expense manager application for android, making it suitable for managing the group expenses.
- Actualized 6 screens for the application via XML.
- Initiated the development in Java to design the required functionalities.
- Incorporated Firebase as the DB for storing user related data.

ACADEMIC PROJECTS

Git Analyzer | Python, PostgreSQL, Tableau, Heroku

Portal for analysing and displaying data of each file of GitHub repository

- Extracted data of repository using GitHub API and stored in postgresSQL database.
- Implemented data analyzer in python to find out most relevant contributors, dependency between files and bugginess associated with each file.
- Integrated the analysed data with tableau for visualizations and displayed on dashboard.

Netflix Prize Challenge | Python, NumPy, pandas, scikit-learn

Predicting user ratings on Netflix prize dataset.

- Converted data in sparse matrix form using NumPy and implemented an item-based collaborative filtering algorithm and obtained accuracy of 80.6%.
- Clustered similar user using k-means algorithm and displayed the same.
- Implemented Singular Value Decomposition using scikit-learn to predict the rating that a user will give to a similar movie.

Operating System Design & Development | C

Design and development on XINU, an operating system similar to UNIX was developed

- **Process Scheduling:** Implemented different scheduling policies with emphasis on process priorities, scheduling, and context switching.
- **Demand Paging:** Added demand paging to XINU using a backing store, implemented required system calls such as mmap, munmap.
- **Readers/Writer locks:** Implemented reader/writers locks with priority inheritance mechanism.

Open source contribution - Expertiza | Ruby on Rails

Internationalization and handling directory creation of Expertiza- An online portal for students

- **Internationalization:** Facilitated internationalization of Expertiza to have support for additional languages.
- Implemented directory name auto - generation.
- Fixed issues in directory creation, created unit tests for the issues and increased code coverage by 30%.

Real Estate Manager Application | Ruby on Rails, Heroku

Application which provides functionalities for buyers to view houses, connect with realtors and facilitates real estate agents to manage house listings.

- Designed and Developed a web-app for Real Estate management using the MVC framework.
- Deployed the application on Heroku Cloud Platform.