VATSAL RUSTAGI

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SKILLS

Programming Languages

Swift
Python
C++
JavaScript
Java

Frontend

iOS
HTML
CSS
Bootstrap

Backend

Node.JS
SQL
MongoDB
Cheerio (JS)
Beautiful Soup (Python)

Other Skills

NoSQL
Tableau
MS Office
Matlab
R
Git
Fluent in English, Hindi
CocoaPods
Heroku
C
C#

COURSEWORK

Data Structure Implementation and Analysis (C++)
Intermediate programming (Python)
Intermediate programming (Java)
Introduction to Data Management (SQL)
Introduction to software engineering (git)
Principles in System Design (C)
Discrete Mathematics for C.S.
Applications of Probability in C.S. (Matlab)
Introduction to Artificial Intelligence
Design and Analysis of Algorithms
Human Computer Interaction

EDUCATION

University Of California, Irvine
B.S. Computer Science 2018
- GPA: 3.947 / 4.0
- Dean's Honor List: Winter 2016 - Spring 2017

EMPLOYMENT

TourUp
Lead iOS Developer

May 2017 to Current
Irvine

- Lead iOS Developer and UI/UX designer at the startup. Created UI mockups for the iOS application using Sketch app based on iOS design patterns and developed the iOS application from scratch in Swift 3 and Objective-C.
- Integrated various APIs (Google Maps, Stripe, Sinch, FBLoginSDK, GoogleLogin etc.) for functionality and pods (WSTagsField, JSSAlertView, SwiftyStarRatingView, Alamofire, SwiftyJSON) for UI and utility purposes in the application.
- Other elements that I worked with: Delegates, UICollectionView, UITableView, UIPageViewControllers, UIScrollView, MKMapView, UISegmentedControl, UINavigationController, UIStackViews etc.
- Worked with team members to come up with design ideas and implemented them in the application. Identified the strengths and weaknesses of the team members and delegated the appropriate jobs to them to carry out the task.

Donald Bren School at UC Irvine
Tutor for Data Structures and Analysis of Algorithms

Sep 2017 to Dec 2017
University of California, Irvine

- Tutor more than 20 college students and help them understand concepts of Data Structures and Algorithms in C++.
- Advanced knowledge of the related topics and debugging skills in C++ are required to be able to help the students.

Dreams for Schools
Mentor at AppJam+

Sep 2016 to Dec 2016, Apr 2017 to Jun 2017
Garden Grove

- Worked with middle school students to build a STEM based Android application - "Eruption".
- App was created using AppInventer (by MIT) a Java based online IDE.
- The app won the fan favorite award in the final showcase among 18 other teams.

PROJECTS

Course Plan
Sep 2017

- An iOS application that tells college students the courses they can take based on the courses they have already taken.
- Developed the backend with Node.JS and the frontend with iOS.
- Web-scrapped UC Irvine's course listings webpage with Cheerio library in JavaScript to get the most up-to-date course listings.
- Applied Kahn's algorithm to topologically sort the courses and display the resulting courses.

Dark Notes Chrome Extension
Sep 2017

- Built a Chrome extension using Javascript, HTML, CSS and Chrome tools to switch on dark mode for online lecture notes.
- The purpose of the extension is to make it easier for students to read online lecture notes which leads to better quality of sleep.

What's In My Fridge
Aug 2017

- Developed an iOS application to keep track of the items in the fridge and keep them from expiring.
- Integrated CoreData to save data on the device. Implemented various cocoapods to improve the UI.
- Used the NSFetchedResultsController to coordinate data between UITableView and the database.

Rent Splitter
Aug 2017

- Developed a rent calculator iOS Application that helps to split rent among roommates. The app lets the user choose an Irvine company UTC apartment for easier user experience.
- Implemented with an MVC model and various iOS elements like UICollectionView, UIPickerView, UITableView etc. Moreover, wrote custom UI classes to modify UITextFields and UILabels and implemented a material color palette.

ACTIVITIES

Association for Computing Machinery at UC Irvine
Member

Apr 2017 to Current

- Solved various programming problems and improved our understanding of data structures and algorithms. Learned new and more efficient ways to solve the same problem.
- Sources of problems: HackerRank, Google Code Jam, CodeChef etc.

Management Information Student Society at UC Irvine
Mentor

Sep 2017 to Current

- Help UC Irvine students, younger than me, with various college and course related activities through my experience and learnings from my years spent at UC Irvine.