Rasmi Lamichhane | Résumé

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Education

The University of Colorado, Boulder
Bachelor of Computer Science — 2012-Current

Experience

Laboratory For Playful Computation — Boulder, CO
Student Android Developer — Fall 2016-Present

University of Colorado Boulder Libraries — Boulder, CO
Student Assistant Digital Lab — Fall 2015-Fall 2016
Digitaling different kind of archival material and processing it.

University of Colorado Boulder Libraries — Boulder, CO
Student Assistant LIT — Summer 2015
Web help desk, Troubleshooting software and hardware problems, image computer, printers problems and etc.

Computer Skills

Language: C/C++, Python, Java, HTML/CSS, Mathematica, SQL, Bash Shell Scripting, Regex

Tools: Unit Testing, Pair Programming, Rest and Soap, Agile/Scrum methodology, Waterfall, Databases

Extra: Github, Adobe Photoshop, Freehand, Microsoft Office

Projects

Sparki Pill Pusher — https://git.io/v64Lp
- Sparki follows specified paths to fetch 1 of 5 bottles. https://youtu.be/TKgePysJxr0
- It uses light sensors to make sure that it stays on the defined path, and uses its ultrasonic sensors to find the fastest path to the bottle at an optimal angle.
- Sparki uses its RFID scanner to scan the pill bottle, making sure that the unique tag matches with the specified bottle number. If an incorrect bottle is approached, Sparki will beep, display a message that it is incorrect, and move back to the start to await more instructions.

Python Data visualization — https://git.io/v68ax
- Created a webpage using HTML, Python, and mySQL. https://youtu.be/K5FWMMMd8d4
- Displays an animated Chloropeth map to visualize Carbon Dioxide Emmissions per state in the US over the past two decades.
- The states are color-coded according to the annual amount of emissions per state in million metric tons of carbon dioxide, and a cursor hover over a particular state will display a breakdown of that state's Carbon emissions per type in petroleum, coal, and gas.

Weather Data visualization — https://git.io/viN7J
- Implemented a webpage that shows the weather across the United States. Used python programming language to grab the API so that it shows in the webpage. Used html for layouting and coloring the states and python for implementing different required functions.

Android Inventory App — https://git.io/viOZW
- Implemented a inventory app using Android Studio with Java and XML. Displays image, price and quantity of the each item and calculates the overall amount of total items. Used various of textview, image view, buttons, linear and relative layout.

Rootfinding — https://git.io/viNQe
- Implemented the Root-finding in python using newton's method, newton's method with line search and cubic methode. Used python programming with Dictionary and Tuple. Gives user a sence of difference between which function is diverging and conversing faster.

Battleship — https://git.io/viNQI
- Implemented the battleship board game. The computer will hold the ships in the grid and the player will have to guess where those ships are. Used C++ classes, loops and different methodes. User can choose the size of the board location of the ship.

Bag — https://git.io/viNQ0
- Bag of array and lists. Used C++ array, single and double linked list with classes, loops, pointers, and different methodes. The features are adding and removing the item in the pocket of magic, potion and good depending on user wants to add.

Stacks and queues — https://git.io/viNQA
- Implemented stacks and queues of array, single linklist and double linked list. Used C++ array, single and double linked list with classes, loops, pointers, and different methodes. Features are adding and removing and moving element depend on users desire.

Extra Curricular

ALP(Applied Leadership Program),CLP(Core Leadership Program),Graphic Designing,Westminister Public Library(Volunteer in the computer class)2014, CUWIC(Women in Computing)