SAURABH SALUJA

Website: https://iamsaurabhsaluja.github.io/index/
E–Mail : saurabhsaluja.connect@gmail.com

OBJECTIVE

On a mission to create, innovate and sell a new product

EXPERIENCE

• 2 Years Experience in Snapdeal and Freecharge as Software Developer 2

(01-Jul-2015 to 31-Mar-2016 Snapdeal**, SD-1** and 1-Apr-2016 to 31-Mar-2017 Freecharge **SD-2**)

• 2.5 Years Own Experience (From 1-Apr-2017 to Current in Python, Django, Machine Learning and Robotics)

PASSION:

- Data Structures, Making automated softwares and hardware, IOT, Neural Networks.

INTEREST

- Data structures, Algorithms, Data Science and Machine Learning, Automation, Sales, Entrepreneurship activities, Sketching Human Faces (https://drive.google.com/drive/folders/0BzRRPPL90vD9NDU1MzFDWlVlZUE)

PROJECTS

- Automatic Mirrors (**Self,** Just Started, IOT): Sensor based mirrors.

- Word Prediction for Recommendation System— (**Self,** Just Started, Machine Learning, **Self** 2017): Creating next word prediction based on neural network and Markov model. This also uses autocorrection system already created using neural network.

- Retail IOT Automation (**Self,** IOT Hardware, Django, Chip Making, Self Project) + Android app:
  1. A small IOT hardware tool to access stock information and generate receipt information.
  2. Created an end to end stock machine using Arduino.
  3. Created a small android app. An Application that can communicate with system for direct login. It can Scan QR to get instant stock details.

- Retail Experience (**Self**): A Very Responsive Retail Management with following functionality:
  1. Inventory Management with QR (For Android App): All sort of inventory data creation like item, category, brand. Linking QR to each item for scanning stock by separate android app.
  2. Receipt Management: Added Addition into receipt, Return of items on a receipt, mapping receipt to accounts.
  3. Loading of Items: Normal addition of Item quantity into stock with Manager Verification of added quantity.
  4. RFID Management (For Stock Machine): RFID to stock item mapping so that a separate Stock machine can access RFID mapped items.
  5. Bulk Upload of items into inventory.

- Automatic Irrigation System (Chip Making, **Self**): Saving my watering time by a self made automatic tap that sprinkle water during morning time.

- A Spellchecker With User Taste for Recommendation System— (Machine Learning, **Self**): Backend implementation of a machine learning back propagation algorithm from scratch using python. The algorithm looks for the nearest words. Threads work together to construct a sub neural network by using word tokens pattern, user history and give the nearest word recommendation. Link will be available soon.

- Dashboard Automation (**Freecharge**, Aug 2015 – Mar 2017): A dashboard that provides very easy way to deploy any set of api’s within minutes. This gives the opportunity to deploy anything within no time

and without any errors as everything is automated. My work includes:
1: Created entire automation for deploying all methods of any client. Very few lines of code is needed for deploying any client apis. Automation is done using data structures recursive algorithms on java reflection methods. Any client can be added within minutes by following very few set of rules. The algorithm go recursively deeply into the client and make request generic json itself which UI can understand easily. UI creates data on screen on the fly based on generic data sent by the system. This api is then hit by user in a very generic way.
2: Everything is maintained in a generic manner so that all clients are compatible.
3: Created Logging plugin for storing request, response, user id related detail.
4: Created auth plugin for restricting user access to apis to specific clients.
5: Created responsive automatic UI. Here UI access generic response and make all kinds of tags using recursive data structure algorithms.
6: Created functionality to block unused API's or remove sensitive function of the client.
7: Created Permission management for users.

- Plugin's and Maintenance (**Freecharge**, Aug 2015 – Mar 2017): Creation of Plugins for controllers. My work includes:
  1: Audit Plugin: Created plugin for auditing. Added functionality of removal of sensitive information on request and response parameters.
  2: Authentication Plugin: Created plugin for checking user access rights on the hitting api.
  3: Maintenance of API's: Adding new Api's, Clients, Creation of new logics as per requirements.

- Bulk Tool (**Freecharge**, Aug 2015 – Mar 2017): A Configurable Bulk Tool. This bulk tool is used by operational team for tasks like block, enable, disable, transfer money, cash backs to users in bulk. I created bulk tool file processing system with the team. The file uploaded in a certain structure is processed line by line using threads and processing is done based on which api to hit on that line. The logic at each processing of line, retrial logic, storying data flags into system is done with me as a part of the team.

UNIVERSITY PROJECTS

- Chess Game (DSA) : Implementation of chess algorithm in Java backend. A human vs computer chess game where computer find the best move until a ply depth is reached. This is based on min max data structure strategy. Each piece is given a value according to how important the piece is for winning. Each attack adds or subtracts its score. The path with max positive value decides next move.
- Document stitching (Image processing) : Making a scalable algorithm to rectify the images and stitch them together to form high quality image. The algorithm is capable of handing distorted images formed by uneven orientation of different cameras.

SKILLS

- Programming languages : Python, Java, C and C++
- Experience in Django, Spring
- Databases : MySQL
- Web/Application servers : Apache Tomcat
- Java Technologies : JDBC, J2EE, AspectJ
- Frameworks : Spring MVC, Hibernate
- Web Technologies : HTML, JavaScript, AJAX, CSS

EDUCATION

- Highest degree : B-tech in IT from VIT University (Batch 2011 - 2015).