

# CLIFFTON FERNANDES

## Education

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**University of Mumbai**  
*Bachelor of Engineering*  
*Information Technology*

2009 - 2013

## Employment

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### **CredR**

August 2015 - Present

*Software Development Engineer II*

Credr is an online marketplace to buy verified pre owned bikes. It has consistently been listed as one of the fastest growing and most promising startups in India.

- Service Oriented Architecture for the core system (Pub-Sub Pattern).
- Built Scalable REST APIs with user permissions and authentication.
- Salesforce Integration.
- Calendar implementation using iCalendar protocol.

### **Zaya Learning Labs**

May 2014 - August 2015

*Full Stack Software Engineer*

**Zaya ClassCloud:** ClassCloud is a wireless 3G education MicroCloud that assists low income schools around the world to access quality education through the Hotspot device without the need for internet access.

- Built a distributed master-master intermittently connected database syncing system using python.
- Built a middleware to direct web requests to query the right database from a list of sharded databases based on the authenticated user, done by overriding some of the database driver code (Django, Postgres).
- Built a module to allow soft deletion of objects from the database which seamlessly integrated with the Django ORM with features like cascade softdelete and cascade undeletion of objects.
- Built a system to allow incremental download of assets and media files from an Amazon Simple Storage Service bucket to a device with async feedback of the progress.
- Built a system to generate custom primary keys for models in a database to uniquely identify the object across a number of distributed databases.
- Built a module to allow remote command line access to remote devices using SSH tunneling.
- Built a custom android home screen launcher to restrict access to the device used by students.

### **Wireddin Interactive**

August, 2013- May 2014

*Software Engineer*

**NextGenCatalogs :** B2B mobile platform where users can create product catalogues, integrate them with their customers phone book, and have product-centric conversations to ease B2B interactions.

- RESTful API for mobile devices using the Django framework module.
- Automatic push notifications, sms/ e-mail verification.
- Automatic image resizing and manipulation using Python Imaging Library.
- Built the Front-End CMS for users using web technologies like AngularJS and Sass.

**Foodie :** Foodie is a universal customer loyalty programme, web service and application where customers can earn loyalty points and businesses can increase traction by offering deals in exchange for the loyalty points.

- Built the scalable core backend functionality and RESTful APIs for mobile devices using the Django framework.
- Built the admin interface and added authentication and authorization in the application so as to make it secure.

**Guidoo** : Virtual tour guide app that provides all the relevant information and virtual tours of tourist locations.

- Implemented a windows phone 8 application using web technologies and phonegap/cordova.
- Used Sencha Touch 2, ExtJs framework to build the UI and core functionality of the application and integrated it with the backend APIs.
- Developed C# cordova plugins for using native windows phone 8 features which are not inherently available in the cordova api.
- Utilized the Google Maps API to add location filtering and other location specific features.

## *Other Projects*

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### **1. Consumer Behaviour Analysis in E-Commerce using Data Mining and Web Technologies**

Developed a recommender system to give suggestions to users using *User to User based Collaborative filtering* algorithms based on the Pearson Correlation Distance to find the similarity between users. Implemented in Php and MySQL.

### **2. DBIT Virtual Tour**

Desktop Application to give a virtual tour of Don Bosco Institute of Technology. Implemented using Visual Basic.

### **3. GSM Controlled Line follower robot**

Robot that can be controlled from anywhere in the world using a simple cell phone. Technologies used atmega8 microcontroller, AVR studio, Embedded C.

### **4. Blood Donation App**

Developed an online service as well as an android app to facilitate donation of blood and also finding blood in case of emergencies. Built as part of the Google Developers Group Hackathon 2014. Features included clinic finder, push notifications for emergency blood donation requests etc.

## *Skills*

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- **Programming** : Python, Javascript, Java, PHP, Visual Basic.
- **Web Development**: Django, AngularJS, ExtJS, JQuery, HTML5, CSS3, NodeJs.
- **Databases/Datastores** : MySQL, Postgres, MongoDB, Redis, Firebase.
- **Operating Systems** : Linux, OS X, Windows.

## *Posts Held*

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1. **Chairperson**:- Computer Society of India (Student Chapter) 2012 - 2013.
2. **Contingent Leader** :- Inter-college cultural fest Malhar 2012 (St. Xavier's College).
3. **Treasurer** :- Computer Society of India (Student Chapter) 2011 - 2012.
4. **Department Head** :- Fine Arts department for the cultural fest Crextal 2011 (DBIT) .

## *Awards*

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1. First Runner-up Google Developers Group Hackathon 2014 @BSE-Ryerson.
2. First Place CSI Battlefield 2012 at K. J. Somaiya Institute of Engineering and Information Technology.
3. First Place PC Doctor at Colosseum 2013 (Technical Fest).
4. First Place Google It! at Technack 2013 (Technical Fest).
5. Second Place VSM at Technack 2013 (Technical Fest).