

Chirag Agarwal

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Highly skilled and experienced software developer, data analyst and process automator.

Technical Skills: Java, Python, React, Redux, C++, JavaScript, PHP, SQL, Spark, .NET, Angular

EDUCATION

- **Viterbi School of Engineering, University of Southern California** Los Angeles, USA
Masters of Science in Computer Science, Current CGPA: 3.9/4.0 January 2019 – December 2020
- **Manipal Institute of Technology** Manipal, India
Bachelor of Technology in Computer Science and Engineering, CGPA: 8.81/10.0 July 2011 – June 2015

WORK EXPERIENCE

- **Amazon.com, Inc.** Seattle, USA
Software Development Engineer Intern May 2020 – August 2020
 - **Multi-Item Concessions Support:** Added backend concessions support for multi-item Amazon orders for the Contact Us ChatBot. Exceeded the planned scope by supporting Fresh orders, damaged items and missing items in shipment scenarios.
 - **ChatBot Multi-Item Picker:** Developed a new item picker using **React** and **Redux** for customers to select the items and their quantities for concession on the chat bot, resulting in an estimated impact of **60,000** agent contact reduction annually.
- **USC Norris Comprehensive Cancer Center** Los Angeles, USA
Student Software Developer May 2019 – May 2020
 - **Publications Portal:** Developed a cancer publications portal for Norris, Stanford and 8 other cancer centers across USA.
- **Citrix R&D** Bangalore, India
Software Engineer 2, Software Engineer 1, Software Engineering Intern January 2015 – November 2018
 - **Product Usage Analytics:** Developed a complete analytics pipeline and service using **Python** and **Tableau** to get impact areas and performance trends using customer usage data from various sources including Citrix's CEIP database, Google Analytics & App stores, helping the team take data-driven business decisions causing an estimated saving of over **\$100,000**.
 - **Video Library:** Led a team of 4 and collaborated with 3 cross-functional teams to create the **Citrix-wide video library**.
 - **Customer Case Analytics:** Implemented a framework on **Python** to fetch, filter and analyze Salesforce customer support cases. Categorized cases using text classification for further analysis and triage.
 - **Lingua:** Developed the Citrix Terminology Portal and **REST** service using **.NET** and **C#** to provide all UI string translations with real-time translation status. Helped different teams to get updates about translation details and progress.
 - **Citrix Documentation Feedback:** Developed end to end feedback gathering and analytics system for docs.citrix.com
 - **Lean Innovation Challenge 2018:** Selected in top 3 from 98 ideas submitted and founded an Internal Startup. The idea was regarding a new product involving workflow automation to improve employee productivity.
 - **Voice of Customer Analysis:** Implemented a sentiment analytics based system to automate data fetching from App stores & Twitter and analyze textual data of reviews and comments utilizing **NLTK** on **Python** to aid business decisions.
 - **Lean Innovation Challenge 2017:** Selected in top 5 out of 150 ideas submitted across Bangalore. The idea was regarding a secure enterprise offline file sharing service which got patented and highly appreciated by Senior Executives.
 - **Athena and Results Manager:** Created a Dashboard and Web Service to track & analyze automation results for all Citrix products. Built parsers for different types of logs generated, and **REST** service for database interactions.

PROJECTS

- **Brain to Computer Interface:** Created a BCI prototype to control IoT devices and computers to help people with paralysis.
- **Weather applications:** Developed a real time web app with **Angular** and **Node.js** and an **Android** app - CSCI-571 project.
- **Recommender systems:** Implemented Model, User & Item based collaborative filtering recommender systems on Yelp data set with **Spark** on **Python** and **Scala** during the course on Data Mining - INF-553
- **Stock Market Prediction:** Implemented a Sentiment Analysis model for predicting prices of Oil Securities using Big Data Analytics techniques and **MapReduce** on large amounts of raw unstructured data, fetched from Twitter and News feeds.

ACHIEVEMENTS AND AWARDS

- **F8 2019 Hackathon:** Invited to the F8 hackathon and conference by Facebook. Contributed to development of an Augmented Reality based education platform on **Spark AR Studio** and **React** and presented it to the CEO, **Mark Zuckerberg**.
- **HackSC:** Won the Facebook award for BSMART, an app to control IoT devices and Tesla cars using **Augmented Reality**.
- **2 Spot Awards:** Received two spot awards from Citrix for projects Product Usage Analytics and Citrix Video Library.
- **3 Citrix Quality Awards:** Received recognition awards for Customer Case Analytics, Product Usage Analytics and Lingua.

PATENTS

- **Authentication for secure file sharing:** U.S. Patent Application filed in April 2019. Application Number: 16/371,406.
- **Secure offline streaming of content:** U.S. Patent Application filed in December 2018. Application Number: 16/223,475.
- **Cloud authenticated offline file sharing:** U.S. Patent Application filed in March 2018. Application Number: 15/924,771.