

# Chirag Agarwal

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

**Technical Skills:** C#, Java, Python, C++, JavaScript, SQL, Spark, .NET, Tableau, Git

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## EDUCATION

- **Viterbi School of Engineering, University of Southern California** Los Angeles, USA  
*Masters of Science in Computer Science, Current CGPA: 3.90/4.0* 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

- **USC Norris Comprehensive Cancer Center** Los Angeles, USA  
*Student Software Developer* May 2019 – Present
  - **Publications Portal:** Contributed to development of a portal to analyze and maintain cancer publications using **ASP.NET** and **SQL Server**. Currently being used by Stanford, Yale and 8 other cancer centers across the USA.
  - **ORIEN USC Website:** Developed responsive website for Oncology Research Information Exchange Network team at USC.
- **Citrix R&D** Bangalore, India  
*Software Engineer 2, Software Engineer 1, Software Engineering Intern* January 2015 – November 2018
  - **Product Usage Analytics:** Developed an analytics 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 store, etc helping the Product Management take crucial data-driven business decisions.
  - **Citrix Video Library:** Led a team of 4 and collaborated with 3 cross-functional teams to create the Citrix wide video library leveraging Brightcove and analytics APIs. Responsible for organizing all video files to ensure the standards are met.
  - **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.
  - **Lexica:** Developed a platform using **MVC**, **.NET**, **C#** and **Perl** to improve product UI quality by detecting spell errors and terminology deviations occurring in all UI strings with automatic logging of bugs.
  - **Lingua:** Developed the Citrix Terminology Portal and Web Service using **MVC**, **.NET** and **C#** to provide all UI string translations with real-time translation status. Helped different teams 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.
  - **DevOps Portal:** Helped in cloud transition by creating an interface for improving team infrastructure collaboration.
  - **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 APIs for database interactions.

## PROJECTS

- **Recommender systems:** Implemented Model, User & Item based collaborative filtering recommender systems on the Yelp data set with **Spark** on **Python** and **Scala**.
- **Community detection:** Implemented the **Girvan-Newman algorithm** to detect Yelp user communities in graphs.
- **Urban Sound Classification:** Worked on a deep learning model to identify various sources of sounds in an input audio file.
- **Stock Market Prediction:** Implemented a Sentiment Analysis model for predicting prices of Oil Securities using Big Data Analytics and Map-Reduce on large amounts of raw unstructured data from Twitter and News feeds.

## 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.

## 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 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.