# Sajal Chandra

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# **EDUCATION**

# UNIVERSITY OF ILLINOIS AT CHICAGO

MS IN COMPUTER SCIENCE

Aug 2022 - May 2024 GPA : 4.0/4.0

# Relevant Coursework

- Natural Language Processing
- Visualization and Visual Analytics
- Big Data Mining
- Advanced Machine Learning

# MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY

B.Tech in Electronics and Communication Engineering 2017-2021 | New Delhi, INDIA GPA: 8.38 / 10

## SKILLS

# **PROGRAMMING**

Languages

Python • Go • JavaScript • C&C++ MySQL • HTML • CSS • Java • Bash Libraries

Pandas • Seaborn • Numpy • NLTK OpenCV • Matplotlib • Scikit-Learn Tensorflow • Regex • GeoPandas BeautifulSoup • XGBoost • D3.js Technologies & Frameworks

Spring • SpringBoot • Azure • Postman Cosmos DB • Maven • JIRA • Hadoop REST API • DevOps • Confluence MongoDB • Jupyter Notebook

# MOOCS

#### **COURSERA**

• Applied Data Science with Python Specialization

#### (University of Michigan Ann-Arbor)

- Big Data Specialization
- (UC San Diego)
- Data Structures and Algorithms Specialization (UC San Diego)

#### **UDEMY**

- Python for Data Science and Machine Learning
- Machine Learning A-Z™: Hands-On Python & R In Data Science
- Python and Django Full Stack Web Developer Bootcamp

# **EXPERIENCE**

#### JAVA DEVELOPER | TATA CONSULTANCY SERVICES

Aug 2021 - Aug 2022 | New Delhi, INDIA

- Reduced codebase bugs by 20% through implementing new features, solving bugs, and testing new code
- Maintained a code coverage level of 85% through testing existing code and writing new JUnit test cases
- Improved on-boarding efficiency by 33% by streamlining the on-boarding procedure for new team members

## EMBEDDED SYSTEMS AND ROBOTICS TRAINEE | TECH EXPLICA

June 2019 - Aug 2019 | New Delhi, INDIA

- Worked on Arduino UNO and AVR Microcontroller projects
- Assembled and configured an Obstacle Avoiding Robot
- Created smart appliances using Internet of Things technologies, including an Automated Alarm System, Motion Activated Lighting System, and Remote Controlled Room Freshener
- Researched about the RFID Cards currently deployed by Indian Railways to track railroad cars

# **PROJECTS**

## AGE AND GENDER CLASSIFIER

- Led a team of 3 members to develop a Haar-cascade and CNN based Age and Gender classifier with GUI deployment, using OpenCV
- Improved classification accuracy from 60% to 85%, with the classifier working on still images, videos, and live feeds
- Utilized pre-trained models and tested the classifier on live feed and stock images

#### CHICAGO TRAFFIC CRASHES ANALYSIS

- Developed a website that provides data visualization of traffic crashes in Chicago for 2021 using Python, JavaScript, HTML, and CSS
- The website contains interactive spatial and temporal plots to help users explore and analyze the data

#### FIFA WORLD CUP CHATBOT

- Developed a chatbot using NLTK that analyses user sentiment towards FIFA World Cup 2022 and summarizes it
- The bot interacts with user through several steps of dialogue, asking about their favorite team and confidence level in its chances

#### RICHTER'S PREDICTOR: MODELLING EARTHQUAKE DAMAGE

- Classification model to group housing structures based on their susceptibility to earthquake damage
- Achieved a micro-averaged F1 score of 0.7501
- This model is currently in the Top 2% of over 5600 submissions

#### **FACEBOOK AD ANALYTICS**

- Created visualizations and used statistical techniques to analyze a FaceBook Ad campaign
- Suggested micro and macro strategies to maximize outreach and increase profit