# Akanksh Belchada

● Dallas, Tx 75252 🜙 +1-4699273611 💟 akanksh.belchada@gmail.com 📊 akanksh-belchada 👩 akanksh07

#### **EDUCATION**

# University of Texas at Dallas, TX

Aug 2021 - May 2023

Master's of Science in Computer Science

GPA: 3.44/4

Coursework: Machine Learning, Database Design, Discrete Structures, Data Structures, Big Data Systems

# University of Pune, India

Aug 2015 - May 2019

Bachelor of Engineering in Electronics and Telecommunication

GPA: 8.87/10

- Best Outstanding Student(2019), Department of E&TC

# **TECHNICAL SKILLS**

Language and Databases: Python, Java, C#, HTML/CSS, JavaScript, MySQL

Developer Tools: Git, HP ALM, VS Code, Eclipse, Anaconda, Jupyter Notebook, Google Colab, PyCharm

 $\textbf{Frameworks/Libraries}: \textbf{Java Swing, WinForms, Selenium, Jenkins, BDD Specflow, Python Flask, Pandas, Numpy, Sklearn, Pandas, Numpy, Nu$ 

Matplotlib

#### **EXPERIENCE**

# **System Engineer** | *Infosys Ltd., Pune, India*

Aug 2019 - Aug 2021

- Designed and developed Java utilities for a cross platform investor migration project for an Australian Banking Corporation.
- Delivered crucial solutions for automating database driven Mainframe and Web applications which successfully helped in migrating 150k clients from legacy to a new platform.
- Performed SIT and regression testing and collaborated with cross functional teams to identify and resolve migration issues.
- Explored ways of automating EOD jobs which improved productivity twofold and achieved seemingly impossible sprint goals.

# **SCADA Intern** | Tata Power Company Ltd., Mumbai , India

Jan 2019 - Feb 2019

• Simplified troubleshooting efforts for SCADA engineers by developing an 'Institutional SCADA Expert System' for accessing diagnostics and resolution steps for various operational issues and deployed it on the organization's intranet.

# **Graduate Teaching Assistant** | *University of Texas at Dallas*

Sep 2021 - Present

• Conduct office hours, mentor project work and grade assignments for CS4347-Database Systems, CS3354-Software Engineering.

# **PROJECTS**

# CoWin Vaccine Slot Availability Chatbot Service | Python Flask, Twilio, MySQL, ReportLab, ngrok

May 2021

- Developed a push based model to notify users about zipcode/age group wise available vaccination slots through a WhatsApp chatbot using PyFlask, Twilio.
- Leveraged CoWin's public APIs by using cron job scheduler to maintain api calls within the government limits.
- Queued concurrent requests and served them when a suitable slot is found available.
- Report lab utility to provide elaborate details of the vaccination centers available to the end user.

# **Autonomous Fire Combat Turret** | Image Processing, Classification, Adaboost Training, Robotics, Raspberry Pi **Aug 2018-March 2019**

- Developed a Haar cascade classifier based system which provides an immediate response to fire breakouts by actuating a ceiling mounted dual axis turret robot.
- Achieved seamless fire detection and effectively deployed an extinguishing agent by locating the co-ordinates of the target fire.
- Developed a GUI for remotely controlling the turret to deploy the extinguishing agent using a track pad and toggle the system to function autonomously or in a remotely operable mode.

# **Netflix Prize: Movie Recommendation System** | Python, Machine Learning, FAISS, Collaboartive Filtering

Sep 2021-Oct 2021

• Implemented a ground up Collaborative Filtering model with Facebook AI Similarity Search/ KNN algorithms to achieve an rmse of 0.96 while working with  $\sim$  3.2 million data points and 100k test users.

# **Python Flask based Micro-blogging Web app** | *Python Flask,MySQL,NginX*

Sep 2019-Oct 2019

- Developed a full-stack web application which can host blogs posted by different users.
- Used SQL for storing/fetching records and used Bcrypt to enforce encryption on passwords stored.
- Used Gunicorn as a gateway server / NginX to act as a load-balancer for a scalable performance.

#### **Twitter Sentiment Analysis** | Python, Nearest Neighbors, Support Vector Machine, TF-IDF, NLTK

Dec 2017-Feb 2018

• Developed a Sentiment Analysis Algorithm for analyzing tweets based on words and hashtags by classifying them as positive or negative using Natural Language Processing and Machine learning concepts.

# LEADERSHIP / EXTRACURRICULAR

**General Secretary** | Sinhgad Student Council, Sinhgad College of Engineering

Aug 2017-Aug 2018

**Quizmaster** | Quizdom, SCOE

Aug 2017-March 2021

**Volunteer** | *SOFTEN*, *Infosys Social Outreach Initiative* 

Sep 2019-Dec 2019