

# AKSHAY AJAY SHENVI

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Website/Portfolio-<https://akshayshenvi.github.io/personal-website/>

## Experience

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- Machine Learning Intern - Digital Reasoning** June 2020 – Present  
**Tech Stack:** PyTorch, Python, Pandas, Numpy, matplotlib, scattertext, plotly, NLP, AWS – EC2, BiGRU, LSTM
  - Researching and Developing an **End-to-End(E2E) Mixed-language text transcription** model on **SEAME Mandarin Audio** data **DeepSpeech 2** architecture.
  - Formatted** data by segmenting chunks of audio and use it to conduct Mixed-language experiments.
  - Data collection and modeling** for Ghazal recommendation system. Performed **N-gram** modeling, **data analysis & visualization** for single author.
- Full Stack Web Developer - Navdurga Pediatric Dental Centre** Dec 2016 – Mar 2018  
**Tech Stack:** JavaScript, NodeJS, ExpressJS, ReactJS, JSON, REST APIs, AWS, MongoDB, GraphQL
  - Planning, Designing & Developing a **Dentist Appointment Scheduling and Billing System**.
  - Aim to **boost** the average appointment scheduling, rescheduling & billing time by **40%**.
  - Planning to cut down effort of storing and searching patient records by **30%**.

## Projects

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- Recipe Web App:** June 2020 - Sept 2020  
**Tech Stack:** HTML, CSS, Angular, Node.js, Express.js, Firebase, MEAN, JavaScript, TypeScript
  - Built an angular web application for storing recipes and the ingredients needed to make it.
  - The app also has a shopping list where the user can add the missing ingredients.
- Grocery Shopping List Web app:** May 2020 – Aug 2020  
**Tech Stack:** JavaScript, Node.js, Express.js, React.js, MongoDB, HTML, CSS, Heroku, Passport js
  - Developed a Grocery List Web Application with React.js and Material UI with User specified custom lists and encrypted passwords.
  - Deployed the Web app on Heroku with data base storage on MongoDB.
- Ghazal Data Analysis and Visualization:** Jan 2020 - May 2020
  - Scrapped Poetry data of 50,000 authors from a well-known Poetry website.
  - Cleaned the data and carried out n-gram and frequency-count analysis and sorted them.
  - Tokenized** and **Normalized** the data and performed various NLP tasks e.g. stop words removal etc.
  - Visualized the data with **Word-clouds, Scatterplots, Bar charts, Pie plots** and **Heatmaps**
- Chatbot using NLP: -** Dec 2019 - March 2020
  - Designed, built an **IPython notebook** on Cornell movie dataset using a **Luong Attention GRU** model in **PyTorch**.
  - Pre-Processed the dataset and trained it on a **GRU** model that uses **Attention** which focusses on current word.
  - Applied **Greedy Search** to predict the next word in the output sentence.
- Realtime Text Transcription:** Sept 2019 - Dec 2019
  - Designed and developed a text transcription tool for preparing PowerPoint, with the help of the **OCR** model that facilitates users to create a PowerPoint quickly by just taking pictures of coded text images.
  - The accuracy achieved was **70% using VGG-19** Convolutional Neural Network (CNN) in **python**.
  - Trained and compared our model with **Tesseract** (Open Source OCR)

- 6. Social Media Sentiment Analysis:** **Mar 2019 - May 2019**
- Designed & Built python script to perform **analysis** on the live **Twitter feed** using **Pandas**. The tweets can be segregated as positive, negative & neutral feed.
  - Used **Apache Flume** for data ingestion & **Hive** as query interface to query out data from **HDFS**
- 7. Pet Store Website:** **Jan 2019 - May 2019**
- Tech Stack: HTML, CSS, React.js, Node.js, Express.js, SQL, Php**
- Designed, developed and deployed a Php based Pet Store Website where users can register and schedule appointments at the Pet store.
  - Migrated the entire php codebase to JavaScript **MERN stack** with **MVC** framework.
- 8. Blog Website:** **Oct 2018 - Dec 2018**
- Tech Stack: React Native, JavaScript, Node.js, Express.js MongoDB, HTML, CSS**
- Created a simple but efficient Blog posting website with date sorted blogs using React Native.
  - The Website has a summary of the list of blogs on the Home page and expands a blog on clicking it.
- 9. Max Connect 4 Game Algorithm:** **Oct 2018 - Dec 2018**
- Developed and implemented a Connect 4 board game using **Python** and **Min-Max**.
  - The algorithm predicts the next moves needed for the computer to win the game.
  - Added **alpha-beta pruning** and variable depth to boost the performance.

## Technical Skills

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- **Languages & Libraries:** Python, Javascript, TensorFlow, sklearn, Pandas, Numpy, nltk, seaborn, HTML, CSS, GraphQL, SQL, NoSQL-Mongo DB
- **Certificates:** *Deep learning Specialization (Coursera), Complete Web Developer (Udemy), DNN in PyTorch (IBM)*
- **Databases:** MySQL, Firebase
- **Cloud and Framework:** AWS-EC2, AWS S3, Google Cloud Platform, Spark, Hadoop, React.js, Node.js, Flask, Express.js, REST API

## Education

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- The University of Texas At Arlington - Master's in Computer Science (GPA of 3.83)** **Aug 2018 - May 2020**  
Majoring in Intelligent Systems & Databases, Coursework - Data Structures and Algorithms, Machine Learning, Neural networks, Cloud Computing, Data Mining, Software Testing
- University of Mumbai - Bachelor's in computer engineering** **Aug 2012 – June 2016**