ABDURRAHMAN CHAUHAN

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/AbdurrahmanChauhan /abdurrahman-chauhan/ YouTube

Mumbai 400064, Maharashtra, India

Dedicated and results-driven B. Tech graduate in Information Technology, specialized in Artificial Intelligence and Machine Learning. With a strong foundation in Python, web development, and data science tools, I have successfully developed robust machine learning models and analyzed intricate datasets. I am eager to leverage my technical expertise in solving real-world challenges and am committed to continuous learning and contributing to cutting-edge AI and technology projects.

EDUCATION

B. Tech in Information Technology | Honours: Artificial Intelligence and Machine Learning	**2020 – 2024**
K. J. Somaiya Institute of Technology - Sion, Mumbai	**9.71/10.0 CGPA**
Higher Secondary Certificate (H.S.C.) | Vocational Course: Computer Science	**2018 – 2020**
S. S. & L. S. Patkar College of Arts & Science - Goregaon, Mumbai	**86 %**
Secondary School Certificate (S.S.C.)	**2006 – 2018**
Millat High School - Jogeshwari, Mumbai	**88 %**

WORK EXPERIENCE

Data Science Intern, TATA Power   January 2024 – Current

- Developed **AI-Based Short-Term Load Forecasting** system achieving 95% Accuracy.
- Designed new data input structure for model optimization by considering 96 blocks.
- Explored various model variants (LSTM, ANN, Arima, Sarima, RFR, Seasonal) to boost accuracy.
- Fine-tuned models for Festival periods based on feature importance.
- Established backend pipeline with API endpoints for seamless model integration.
- Crafted visually engaging Power BI Dashboard for comprehensive insights.
- Engineered 14-day & Including_Today Load prediction models, integrating into backend pipeline.
- Rigorously tested, optimized, and integrated external backend contributions for system reliability.
- Leveraged a tech stack including Python, TensorFlow, Scikit-learn, FastAPI, Power BI, Git and more for project development and optimization.

Under the Guidance of:

1. Dr. Suresh Ukarande, Former Principal of KJSIT, Principal K J Somaiya College of Engineering & Dean, Faculty of Engineering and Technology, Somaiya Vidyavihar University.
2. Shri Krishnanand Hosalikar, Head & Scientist - G, Climate Research & Services & SI Division, IMD Pune.
3. Dr. Radhika Kotecha, Associate Professor and Head - Department of Information Technology, KJSIT.
4. Trusha Biswas, Head Technology and Quality Tata Power.
5. Rane Vismay, Group Head - Power Purchase at Tata Power.

Data Analyst Intern, India Meteorological Department (IMD)   June 2023 – May 2024

- Developed a comprehensive Weather Data Analytics Dashboard for the Pune region, aimed at visualizing and analyzing weather data.
- Designed an intuitive user interface to present weather insights in an accessible manner.
- Mined actionable insights from the data to understand the implications of climate on key sectors such as healthcare, agriculture, and beyond, leveraging accurate weather data.
- Showcased weather patterns, seasonal trends, and extreme weather events to facilitate informed decision-making.
- Leveraged a tech stack including Python, Power Automate, SharePoint, Power BI and more for project development and optimization.

Machine Learning Intern, India Meteorological Department (IMD)   November 2022 – May 2023

- Developed Heatwave Watch System with high KPCC (~80%) and accuracy (~92%) with RMSE of 3°C based on weather parameters.
- Conceptualized and implemented segmentations using advanced techniques to deal with data inconsistencies.
- Created and optimized 28 deep learning models (DNN, LSTM) and evaluated their performance.
- Designed robust pipelines and created efficient API endpoints.
- Leveraged a tech stack including Python, TensorFlow, Scikit-learn, Flask, Git and more for project development and optimization.

Under the Guidance of:

1. Dr. Suresh Ukarande, Former Principal of KJSIT, Principal K J Somaiya College of Engineering & Dean, Faculty of Engineering and Technology, Somaiya Vidyavihar University.
2. Shri Krishnanand Hosalikar, Head & Scientist - G, Climate Research & Services & SI Division, IMD Pune.
3. Dr. Radhika Kotecha, Associate Professor and Head - Department of Information Technology, KJSIT.
4. Dr. Rajib Chattopadhyay, Scientist - E, Climate Research & Services, IMD Pune.

Full Stack Web Developer Intern, KJSIT   June 2022 – Current

- Developed & maintained Examiner Appointment System used by the Exam Cell of K.J. Somaiya Institute of Technology (KJSIT).
- This system serves to appoint internal and external examiners/paper setters.
- Appointment PDF Generation: It generates appointment-related PDFs, which contain essential information about the appointments.
- Email Integration: The system sends email notifications to the respective examiners with their appointment and attaches the generated PDF.
- Record Keeping: The system maintains a record of all appointments, which can be crucial for tracking and auditing purposes.

Under the Guidance of:

1. Dr. Suresh Ukarande, Former Principal of KJSIT, Dean, Faculty of Engineering and Technology, Somaiya Vidyavihar University.
2. Dr. Radhika Kotecha, Associate Professor and Head - Department of Information Technology, KJSIT.

Coconut Tree Project   October 2022 – December 2023

- Developing a mobile-based system for early detection of coconut tree diseases, ultimately improving product quality and yield.
- Actively involved in the project's efforts to provide coconut farmers with timely disease diagnosis and actionable remedies, enhancing agricultural practices and sustainability.

Under the Guidance of:

Vinaykumar Sir, Pradnya Patil Ma'am and Aarti sahitya Ma'am

MAJOR PROJECTS

Snappy door Trava - Smart Door (IoT)   July 2022 – December 2022

Assisted people in gaining remote access to their doors using facial recognition, voice recognition, Bluetooth, keypad module, and live security feed.

Accolades:

- ☑ Winner in Event Gallery ICON 2k23 organized by K J Somaiya Institute of Management, Mumbai
- ☑ Runner-up in Tech-A-Thon 48 hrs. hardware hackathon organized by Thadomal Shahani Engineering College. (TSEC)
- ☑ Selected for Top 100 CREATIVE IDEAS & INNOVATIONS IN ACTION (CiiA)-2 2023

Care4You - Website for Counselling and Appointment bookings   October 2022

Developed a web platform facilitating appointment bookings for users, assisting in scheduling desired appointments easily.

- ☑ 1st Runner-up in Innovathon 2022 (Hackathon) organized by Institution's Innovation Council (IIC)

HandyMouse - Virtual Mouse   January 2022 – May 2022

Developed a real-time AI virtual mouse system using computer vision to avoid COVID-19 spread, based on hand gestures.

ChatBot : This is a simple chatbot which is created in JAVA for a project. You can chat with it as long as you like. You can play a number game with it or ask it the capital of any country.

StoreCase : This is an Inventory Management System Created Using Java AWT and Java Swing. It enables the store owners to manage their stocks.

CSI-Hackathon-Website : Sample website created for displaying hackathon details.

Weather-App : I created react-weather-app which will display 5 Days of forecast by using weather API.

SIMPLILEGAL : AI-Powered Legal Documentation Assistant using Generative AI.

Outfit_Recommendation_System : Developed a local application utilizing machine learning and computer vision techniques to provide personalized outfit recommendations based on user-uploaded clothing images, enhancing user fashion choices and convenience.

Greenify : Traditional waste management systems are often inefficient and costly. Cities and municipalities are struggling to keep up with the growing volume of waste, and this is leading to environmental problems and public health risks. A smart waste management system could help cities and municipalities.

ACHIEVEMENTS AND RECOGNITIONS

- Author of Copyrighted Software **Examiner Appointment System** (Ref. No.: SW-17510/2023) owned by K. J. Somaiya Institute of Technology, Mumbai.
- **Recognized** for skills, sincerity, dedication, and inquisitiveness **by K. S. Hosalikar, Head of Climate Research and Services**, IMD Pune.
- Received **Letter of Appreciation** for valuable contributions to the "**Examiner Appointment System (EAS)**" during UG studies in the IT department under the guidance of **Dr. Suresh Ukrande & Dr. Radhika Kotecha** on 6th October 2023.
- Received **Letter of Appreciation** for valuable contributions to the "**Heatwave Watch System**" during UG studies in the IT department under the guidance of **Dr. Suresh Ukrande & Dr. Radhika Kotecha** on 6th October 2023.
- Received **Letter of Appreciation** for valuable contributions to the "**Weather Data Analytics Dashboard**" during UG studies in the IT department under the guidance of **Dr. Suresh Ukrande & Dr. Radhika Kotecha** on 6th October 2023.
- Secured **3rd rank** in the **Sustainable Solution competition** on World Environment Day, presented by **Baldevkrishan Sharma**, **Chairman** of CiiA, and **Bhavisha Nakashe**, **Rtn. Sachin Singhvi**, **President** of Rotary Club of Bombay Worli, and PR coordinator of CiiA.
- Awarded **3rd position** in **TECH-A-THON 23** (48 Hrs HARDWARE HACKATHON) conducted by Electroverse.com-TSEC 2022-23, in collaboration with the Department of Electronics & Telecommunication Engineering of Thadomal Shahani Engineering College on 1st April 2023.
- Achieved **1st place** in the **CogniQuest**: **Data Science Quest** 2023 organized by K. J. Somaiya Institute of Technology, Sion.
- Awarded for presenting an **innovative project idea** for the **Smart Door** at the **CiiA-2** Innovation Exhibition, held on 1st-3rd February 2023 at **Nehru Centre**, Worli, Mumbai. Presented by **Rtn. Sachin Singhvi, President, Rotary Club** of Bombay Worli 2022-23, and **Baldevkrishan Sharma, Chairman - CiiA** & BS Marshal's Foundation.
- Achieved **2nd place** in the **DEBATE** Competition at the annual Cultural festival, Surge 2023 organized by K. J. Somaiya Institute of Technology, Sion.
- Won the **2nd Prize** in the **Slogan Making Competition** on the theme of **'Combating Covid-19 Pandemic'** held on 5th June 2021, organized by The Department of Basic Sciences & Humanities.
- **1st Runner-up** in **Innovathon** 2023 (**Hackathon**) organized by Institution's Innovation Council (**IIC**)
- Recognized for participation in the **National Level Competition - IDEATHON 2.0** - 2023, organized by WISE SNDTWU Incubation Centre and Usha Mittal Institute of Technology. Presented by Directors: Dr. Ashish Panat (SNDTWU Innovation, Incubation & Linkages), Dr. Yogesh Nerkar (Principal - UMIT), Dr. Laxmi Goritiyal (CEO - WISE SNDTWU Incubation Centre).

OTHER ACTIVITIES

- Served as a **mentor** for "**Atal Tinkering Labs**" at 'Anjuman-I-Islam Saif Tyabji Girls High School Ln' and 'St. Xavier's High School, Borivali East,' fostering innovation and creativity in young minds.
- **Organized** a **competitive coding competition** on HackerRank, fostering a coding culture.
- **Organized and delivered** a seminar on "**Gen AI**" showcasing knowledge sharing and presentation skills.
- **Led** a team of 30 classmates and juniors in a **Floor Decoration** Event, securing the **winning position**.
- Student **Proctor** for Junior FY, providing guidance and support to junior students for a smooth transition.
- Elected as **Class Representative** (CR), effectively communicating and representing the class's interests to faculty and administration.
- Volunteered at **Maker Mela**, Asia's largest platform for Makers, contributing to the success of the event.
- Actively participated in **Somaiya Games Athletics**, promoting a healthy and active lifestyle.

SKILLS

Programming Languages: Python, C, C++, Java
Web Development: HTML, CSS, Bootstrap, JavaScript, jQuery, React.js, Node.js, Express.js, Angular, Flask
Mobile App Development: Android Development (Java/Kotlin), Flutter
Frameworks & Libraries: TensorFlow, Keras, Pandas, Scikit-Learn
Databases: MySQL, MongoDB, Redis
Data Science & Analytics: Tableau, Power BI
Tools & Technologies: Git, MS Office, Canva, Google Workspace
Others: IoT, Web Scrapping, Google Cloud, R&D, Leadership, Team Management

CERTIFICATIONS

[1]	Introduction to Generative Al | Google Cloud	**October 2023**
[2]	Level 3 GenAI: Prompt Engineering | Google Cloud	**October 2023**
[3]	Perform Foundational Data, ML, and AI Tasks in Google Cloud | Google Cloud	**October 2023**
[4]	Build and Secure Networks in Google Cloud | Google Cloud	**October 2023**
[5]	Perform Foundational Infrastructure Tasks in Google Cloud | Google Cloud	**October 2023**
[6]	Create and Manage Cloud Resources | Google Cloud	**October 2023**
[7]	Google Cloud Computing Foundations: Data, ML, and AI in Google Cloud | Google Cloud	**October 2023**
[8]	Google Cloud Computing Foundations: Networking & Security in Google Cloud | Google Cloud	**October 2023**
[9]	Google Cloud Computing Foundations: Infrastructure in Google Cloud | Google Cloud	**October 2023**
[10]	Google Cloud Computing Foundations: Cloud Computing Fundamentals | Google Cloud	**October 2023**
[11]	AWS Academy Graduate - AWS Academy Machine Learning Foundations | AWS	**April 2023**
[12]	Android Study Jams | Google DSC – NIT	**October 2022**
[13]	Python 3.4.3 | Spoken Tutorial | IIT Bombay	**May 2022**
[14]	Communication Skills | TATA Consultancy Services | tcsiON	**October 2023**
[15]	Additional Certifications: https://drive.google.com/drive/folders/1onIVh57t2q-OvPPskwmbPzZNa7PYDFHQ	

INVOLVEMENT IN COMMITTEE, CLUB & COUNCIL

- Chief Marketing Officer (CMO) **| Institution of Engineers, India (IEI) – KJSIT Students' Chapter**   **June 2023 – June 2024**
- Technical Admin **| Institution of Engineers, India (IEI) – KJSIT Students' Chapter**   **June 2022 – May 2023**
- Technical Team member **| Computer Society of India (CSI) – KJST Students' Chapter**   **June 2021 – May 2022**
- Organizing Team member**| Student Council (SC) – KJSIT**   **September 2020 – February 2021**
- Active member | **Infinite Club** | CodeChef Campus Chapter: Official competitive programming club of KJSIT
- Active member | **S4DS** | Knowhow – KJSIT
- Active member | **GDSC** | **Google Developer Student Club – KJSIT**
- Core member | **Code AI |** Powerful AI community and focuses on learning and innovating powerful AI-driven solutions

HOBBIES & INTERESTS

Attending Live Events | Collecting Coins | DIY Projects and Crafts | Fitness and Exercise (Gym, Running, Cycling, etc.) | Philosophy and Deep Discussions | Socializing and Networking | Technology and Gadgets | Writing and Performing Poetry or Spoken Word.

PERSONAL PARTICULARS

- Date of Birth: 2nd April, 2002
- Place of Birth: Mumbai
- Gender: Male
- Languages Known: English, Urdu, Hindi and Marathi.
- Nationality: Indian
- Current Address: Malad West, Mumbai 400064.

DECLARATION

I hereby declare that the information furnished above is correct to the best of my knowledge.
All the required supporting documents are available at https://drive.google.com/drive/folders/1onIVh57t2q-OvPPskwmbPzZNa7PYDFHQ