AKSHATA A BHAT

Email   LinkedIn   GitHub   Website   Blog

EDUCATION

Institution	Degree	Grade	Year
Vellore Institute of Technology, Vellore	B.Tech Computer Science and Engineering	8.45 CGPA	2020-2024
VVS Sardar Patel PU College	12th Standard	96.66%	2020
Sri Vidya Mandir Education Society	10th Standard	96.80%	2018

SKILLS

Technical Skills   **Programming Languages:** Python, Java, PHP, JavaScript, SQL
Other: AWS, Beautiful Soup, tensorflow, GitHub

EXPERIENCE

SDE Intern   Jan 2024 - Present
Hyprbots Systems   *Bengaluru, India*

- Integrating machine learning with finance and expense management.

Product Developer Intern   June 2023 - Dec 2023
Block Convey   *Remote*

- Worked on integration of machine learning algorithms with Blockchain As A Service through Ethereum smart contracts.
- Working on integration of AutoML (GCP) with quorum.

Data Analyst Intern   Jun 2023 - Sep 2023
Coldpress AI   *Remote*

- Scraped and analysed 500+ open source datasets from 5 sources to generate a open source repository of computer vision datasets.

Research Intern   May 2023 - Aug 2023
Centre of Excellence in Advanced Manufacturing Technology, Indian Institute of Technology, KGP   *Remote*

- Developed a novel cDCGAN algorithm to generate Scanning Electron Microscope images for additive manufacturing of steel.
- Achieved an accuracy of 96.54% to the original images.

Data Scientist Intern   Jan 2023 - Jul 2023
The Indegenous   *Remote*

- Created a multilingual web scraping tool from scratch which fetched approx. 150,000 data records and 6 comprehensive datasets on news articles based on indigenous peoples.

Research Intern   Jun 2022 - Jul 2022
Indian Institute of Science   *Bengaluru, India*

- Developed neural network model to detect Breast Cancer from histopathology images using deep learning. Achieved an accuracy of 80% and the model classified 27,000 samples out of 33,700 samples correctly.

PROJECTS

1. Artify- Image Editing Website – Developed an image-editing website using OpenCV and Flask. The user can adjust brightness, saturation, grayscale and perform rotations on the image. The website includes a text-based image editing interface.(GitHub Repo)

2. MedCare, telemedicine healthcare website – Built a website to provide medical services, video calling, nearest doctors, and online medicine using HTML, CSS, MySQL, PHP, and Google Maps API. (GitHub Repo)

3. Review Summarization Build a project for sellers to understand their customers using NLP algorithms like LSTM, Latent semantic analysis and Hierarchical Dirichlet Allocation.   (GitHub Repo)

PUBLICATIONS

- **"Generating and solving mazes using Parallel Minimum Spanning Tree algorithms"**- paper presented at SmartTechCon 23 - IEEE Xplore indexed conference. (Link)
  Generated mazes using MST algorithms and solved it using Djikstras algorithm. All the algorithms were parallelized using OpenMP and achieved an increase of 68% in efficiency over serial implementation.

- **"Real Time Bimodal Emotion Recognition using Hybridized Deep Learning Techniques"** - paper presented at ICMLDE 2023. (Link)
  Implemented a CNN-LSTM and Multi-layer Perceptron model for bimodal emotion detection from video and audio data. Achieved an accuracy of 79.34 % and 77.27% in comparison to existing models.

- **"Predictive Modelling of Water Potability using Ensemble Machine Learning Algorithms"**- paper accepted at Technoscape 23.
  Implemented a custom stacking based ensemble model to predict water potability. Proposed model achieved an accuracy of 84.5%.

- **"COVID-19 detection using VGG-ResNet model from Chest X-Rays"** - paper under submission to IEEE (journal).
  Developed a novel hybrid VGG-ResNet model to detect COVID-19 from XRay images. The model achieved an accuracy of 93.67% . Presented a comparison with Auto Encoder based CNN model.

EXTRA-CURRICULAR ACTIVITIES

- Selected for the **Microsoft Engage** Mentorship Program 2022 and developed a blockchain-based face authentication E-Voting application. (GitHub Repo)

- Executive Board Member of IEEE Women In Engineering, VIT chapter. Organized and coordinated 50+ online events, hackathons and flagship events, ensuring smooth execution and participant engagement.

- **Student Placement Coordinator** at the **Career Development Cell, VIT** – Coordinated and managed placement-related activities of 150+ students in the Career Development Cell, VIT.

- Secured 4th position in Hack DSC by VIT-Bhopal among 25+ teams.