Amisha Gangwar

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in https://www.linkedin.com/in/amisha-gangwar-486669167

⬤ https://github.com/amisha-21

Portfolio: https://amisha-21.github.io/amisha-portfolio.github.io/

EDUCATION BACKGROUND

University of Allahabad — **Prayagraj(Allahabad), India**

B.Tech, Computer Science and Engineering; GPA - 9.27/10.00; Top (3/60) — *May 2022(Expected)*

- **Dissertation** : Air Pollution Monitoring and Forecasting System.(Pre-Final year)
- **Relevant Coursework**: Database Systems, Data Structures, Operating Systems, Theory of Computation, Design and Analysis of Algorithms, Computer Networks, Advance Concepts of Programming Language.

EXPERIENCES

Independent Research and Development Lab — **Hyderabad, India(Remote)**

Machine Learning Researcher — *Sep. 2021-Present*

- Working on Plant Weed Classifier.

Defence Research and Development Organization(DRDO) — **Chandigarh, India**

Summer Researcher — *Jul. 2021-Sep. 2021*

- Formed Graphical User Interfaces (GUIs) using python Tkinter library and MATLAB for emerging armament applications - **Exploding Bridge Wire and Explosive Welding.(Major)**
- Engineered the riot and fire detecting system for Terminal Ballistic Research Lab with CNNs .
- Achieved the accuracy of **94%** and **87%** for fire and riot systems respectively. (**Minor**)
- Presented my work in front of senior scientists committee.(**Only 5 projects are selected every summer out of 30**)

Internity Foundation — **New Delhi, India(Remote)**

Machine Learning Mentor — *Jun. 2021-Aug. 2021*

- Assist group of **10 trainees** with their coursework and doubts during weekend hours.
- Taught sentiment analysis paradigm using Large Movie Review Data(Stanford Dataset).

Indian Institute of Technology, Delhi — **New Delhi, India**

Summer Trainee — *Jun. 2019-Jul. 2019*

- Only **100 students** are selected from all over the India.
- Grasped the fundamental theory of Machine Learning, Cloud Computing, and Internet of Things(IoT).
- Developed a real-time IoT-based data analysing model to analyse the groundwater level of drought-prone fields.

UNDERGRADUATE RESEARCH (in the lab of Dr. Sudhakar Singh)

University of Allahabad (Dept. Electronics and Communication) — **Prayagraj, India**

Undergraduate Researcher — *Oct. 2020-Present*

- Explored various Air Pollution Monitoring and Predicting System. Compiled a review paper under the guidance of Dr. Sudhakar Singh.
- Forecasted PM2.5 of Delhi region studying and utilizing combination of stacked algorithms and improved the results by **5%**.(**Pre-Final year Dissertation**)
- Also contributed to three other research projects - Sentiment Analysis and Sarcasm Detection of Indian General Election Tweets, An Efficient Model for IoT Security using Adopted RSA and Sign Language Recognition System using TensorFlow Object Detection API. (**Research Work**)

PROJECTS

Crypto-new-summarizer

- Developed a pipeline to get summarized Yahoo news, sentiments, and URLs related to Bitcoin, Ethereum, and Dogecoin in the form of a CSV file. The scraped news was summarised using the financial summarization Pegasus model and automated with a Python script.

Face Mask Detection

- Designed real-time mask detection using of labelImg and Transfer Learning; mask detection using of IBM Watson Studio.

SKILLS INTERESTS

- **Programming** : Python, C/C++, MATLAB,HTML5/CSS, SQL, R, Arduino, Latex.
- **Libraries**: NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, OpenCV, Keras, Tensorflow, NLTK.
- **Language**: Fluent in English and Hindi.

CERTIFICATES

- **Improving Deep Neural Networks: Hyperparameter tuning, Regularization, and Optimization** - Coursera Certificate
- **Structuring Machine Learning Projects** - Coursera Certificate
- **Neural Network and Deep Learning** - Coursera Certificate
- **Machine Learning** - Coursera Certificate

PUBLICATIONS

- Arpit Khare, **Amisha Gangwar**, Sudhakar Singh, Shiv Prakash, "Sentiment Analysis and Sarcasm Detection of Indian General Election Tweets", in Proc. International Conference on Advanced Network Technologies and Intelligent Computing (ANTIC -2021), Springer, Dec. 17-18, 2021, BHU, Varanasi, India, Scopus Indexed. (**Accepted**)
- Sharvani Srivastava, **Amisha Gangwar**, Richa Mishra, Sudhakar Singh, "Sign Language Recognition System using Tensorflow Object Detection API", in Proc. International Conference on Advanced Network Technologies and Intelligent Computing (ANTIC -2021), Springer, Dec. 17-18, 2021, BHU, Varanasi, India, Scopus Indexed. (**Accepted**)
- S. K. Yadav, Sudhakar Singh, Uttam K Sharma, Pratibha Dixit, Shiv Prakash, **Amisha Gangwar**, "An Efficient Model for IoT Security using Adopted RSA", in Proc. Sixth International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2021), Dec. 17-18, 2021, Jaipur, India, Scopus Indexed. (**Accepted**)
- **Amisha Gangwar**, Sudhakar Singh, Richa Mishra, Shiv Prakash, "The State-of-the-Art in Air Pollution Monitoring and Forecasting Systems". (**Under Review**)

VOLUNTEERING EXPERIENCE

Youth Empowerment Foundation   **New Delhi, India**
Volunteer   *Jan. 2021-Present*

- Collected funds for daily wage workers and sanitary pads.
- Designed various social media posters for raising funds.
- Developing courses and lectures about basic computer (MS-Word, MS-Excel) applications for underprivileged children.

REFERENCES

- **Dr. Sudhakar Singh**- sudhakar@allduniv.ac.in
- **Dr. Shiv Prakash**- shivprakash@allduniv.ac.in
- **Dr. Richa Mishra**- richa_mishra@allduniv.ac.in