

Arnav Ahuja

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Education

- **Birla Institute Of Technology and Science, Pilani, Rajasthan, India** 2018-2023
Bachelor of Technology Computer Science
Master of Science in Mathematics (Dual Degree)
Overall CGPA: 8.03/10
- **St Xavier's School, Jaipur** 2017-2018
All India Senior School Certificate Examination (Class XII)
Percentage: 95.6%

Research Experience & Internships

- Crop Disease Identification** **BITS Pilani**
Guide: Prof. Jennifer Ranjani, Department of Computer Science 2020
 - Developed a new deep learning architecture to identify diseases in the leaf of tomato plant
 - Achieved an accuracy of 98.16% which is higher than the traditional resnet model (97.5%)
 - Improved the accuracy of real images significantly by creating a new dataset using augmentation
 - In process of publishing the work done
- Earthquake Forecasting** **BITS Pilani**
Guide: Prof. Sumanta Pasari, Department of Mathematics Fall 2020
 - Implemented a model which forecasts earthquakes using seismicity information in five different regions
 - Achieved an accuracy of 90.4% in forecasting the probability of an upcoming earthquake in the Himalayas
- Facial Recognition Based Attendance System** **TNHSR**
Guide: Dr. Viduthalai, IT Expert Summer 2020
 - Developed a facial-recognition based attendance system to help curb the spread of COVID-19 by avoiding contact with infected surfaces
 - Used openCV library for facial recognition

Publications

- **Arnav Ahuja, Sumanta Pasari Forecasting Earthquakes Using Neural Network Models.** (Springer Nature) Disaster Management in Complex Himalayan Terrains - Natural Hazard Management, Methodologies and Policy Implications Accepted.

Technical Skills

- Programming Languages** - C++, C, Java, Python
- Data Science Libraries** - PyTorch, Pandas, Numpy
- Machine Learning** - CNNs, RNNs, GRUs, LSTMs

Extracurricular Activities

- **Member of Student's Academic Council** - Organized various talks and activities to augment the academic and research culture of the campus [2020-present]
- **Class Head of 8th standard (NSS)** - Supervised all class 8th activities; prepared schedules for all students and volunteers [2019-2020]
- **Volunteer at National Service Scheme (NSS)** - Mentored underprivileged students and tutored them on their curriculum subjects [2018-2020]

Relevant Coursework

- **Computer Science** - Data Structures and Algorithms, Database Management Systems, Object Oriented Programming, Computer Programming
- **Mathematics** - Operations Research, Graphs and Networks, Optimization, Applied Stochastic Processes, Discrete Mathematics