

SHREY SHAH | RESUME

- » Status: Seeking Job in a software development field.
- » Degree: Final Year Student at BITS Pilani - B.E.(Hons) in Computer Science, M.Sc. in Biological Sciences.
- » Skills: Java, Python, Golang, Keras, Tensorflow, C, C++
- » Interests: Software Development, Deep Learning specifically Biomedical Image Analysis



Education

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| 2015 - 2020 | M.Sc. Biological Science and B.E. (Hons.), Computer Science | BITS Pilani |
| | <ul style="list-style-type: none"> » Thesis: Lung Cancer Detection using CT Scan Images at Hiroshima University » Current CGPA - 9.26 » <u>Relevant Coursework</u>: Machine Learning · Data Structures and Algorithms · Object Oriented Programming · Database Management · Operating Systems · Computer Architecture · Theory of Computation · Neural Network and Fuzzy Logic · Discrete · Structures Microprocessor & Interfacing · Principles of Programming Language · Design and Analysis of Algorithms · Computer Networks · Cryptography · Compiler Construction | |
| 2014 - 2015 | ISC - Indian School Certificate, Grade XII | Zydus School |
| | <ul style="list-style-type: none"> » Passed with Distinction with 95%, ranked #3 in school | |

Publication

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|------------|--|----------------------|
| April 2020 | Lung Cancer Detection | Hiroshima University |
| | <ul style="list-style-type: none"> » Shrey S.B., Hakim L., Kavitha M., Kim H.W., Kurita T. (2020) Transfer Learning by Cascaded Network to Identify and Classify Lung Nodules for Cancer Detection. In: Ohyama W., Jung S. (eds) <i>Frontiers of Computer Vision. IW-FCV 2020. Communications in Computer and Information Science</i>, vol 1212. Springer, Singapore | |

Experience

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|--------------------|---|----------------------|
| Jan/'20 - Present | Intern, Member of Technical Staff | Nutanix |
| | <ul style="list-style-type: none"> » Working with the Microservices Platform Team to help onboard the nutanix services and microservices on the platform. » Working with docker containers to implement a python automation script which generated a tar package with the required files to run on the platform. » Worked on various tasks which involves coding in python and golang. | |
| Aug/'19 - Dec/'19 | Research Intern | Hiroshima University |
| | <ul style="list-style-type: none"> » Worked on Lung Cancer detection using CT scan Images. » Created a Cascaded network to forward the suspicious nodule containing images to the classifier network and discard the non-suspicious images. The classifier helped segregate the nodules into benign and malignant. » Work was accepted as a conference paper in IW-FCV 2020 which was later published as post conference proceeding in springer. | |
| May/'19 - July/'19 | Machine learning Intern | JP Morgan Chase |
| | <ul style="list-style-type: none"> » Trained various models with different algorithms, compared the accuracy and tuned the hyperparameters for best results. » Publicly available dataset from yahoo finance and internal dataset from JPMC was used for the training purpose. » Created a GUI for enhanced user interaction for the same using tkinter library in python. | |

Projects

Jan/'19 - April/'19 Target Detection using EEG Signals

- › Detecting p300 peaks obtained in the EEG signals of the brain. ConvLSTM model used to identify and classify the peaks into p300 and non-p300.
- › Tried various methods to reduce the bias of dataset eventually leading to a better model accuracy over the one mentioned in the research paper.

Jan/'19 - Apr/'19 Compiler Construction

- › As a part of the course Compiler Construction, had to implement a compiler from scratch for a uniquely defined language.
- › The compiler could parse the language code and output errors if any.

Oct/'18 - Dec/'18 Race Prediction from facial Images

- › Predicted the race of the person from the facial Images cropped and centred.
- › 2 Models were used: Transfer Learning model pre-trained on ImageNet dataset and a Deep Learning model trained from scratch on UTKFace dataset.
- › Compared the accuracy and training time for both the models.

Oct/'18 - Dec/'18 Lung segmentation from CT scan images

- › Lungs were detected in CT Scan Images, training data used was CT scan images and hand labelled masks to identify the lungs.
- › U-net type architecture was trained on the masked images using dice coefficient as loss function owing to imbalance in masks (small lung masks as compared to the full image).
- › Model was later tested on private dataset at Hiroshima University and performed up to the mark.

Apr/'18 - May/'18 Scala Project

- › As a part of the course Principles of Programming Language, had to implement a two layered convolutional neural network.
- › Convolutional, pooling, activation and normalization layers were implemented in scala from scratch.

Position of Responsibility

Mar/'17 - Dec/'17 Coordinator, Gaming Club BITS Pilani

- › I worked as a coordinator for the event Ignition in BOSM 2017 which saw the participation of over 200 students and lasted over 4 days

Jan/'17 - Mar/'17 Event Coordinator, Gaming Club BITS Pilani

- › I worked as event coordinator for Armageddon, APOGEE 2017 in which I oversaw and conducted various individual gaming events.

Scholarships

2015 - 2020 Inspire Scholarship

- › INSPIRE Scholarship by Govt.of India (awarded to top 1% Sciences UG students).

2016 - 2017 Merit Scholarship

- › Merit Scholarship by BITS Pilani (awarded to top 25 students across campus).