# Het Shah

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#### **FDUCATION**

#### BITS PILANI, GOA CAMPUS

B.E. IN COMPUTER SCIENCE Jul 2021 CGPA: 8.37 / 10.00

#### GOOGLE AI RESEARCH SUMMER SCHOOL

Aug 2020 Among 150 students selected. Selected in HCI and AI4SG track

#### **UDGAM SCHOOL**

May 2017 | HSC Percentage: 91%

## D.A.V. INTERNATIONAL SCHOOL

May 2015 | SSC CGPA: 9.80 / 10.0

## COURSEWORK

Neural Networks and fuzzy logic Machine Learning Automated Theorem Proving Intro to Cognitive Neuroscience Data Structures and Algorithms Logic in Computer Science Linear Algebra Advanced Calculus Probability and Statistics Differential Equations

### CERTIFICATION

DeepLearning.ai | (Certificate) Nettech (top 10) | (Certificate)

## **SKILLS**

#### **PROGRAMMING**

Python • C++ • C • JAVA JavaScript • MySQL

#### **FRAMEWORKS**

PyTorch • Tensorflow • Keras ReactJS • NodeJS • ExpressJS

## CLOUD

AWS • GCP

## VOLUNTEERING

Abhigyaan - NGO

#### **EXPERIENCE**

## VISUAL COMPUTING LAB(VCL) IISC, BANGALORE | RESEARCH INTERN December 2020 - Present

• Working on project titled "Few shot pose estimation".

## **APPCAIR, BITS GOA** | UNDERGRADUATE RESEARCH COLLABORATOR January 2020 - Present | Links: Project (IKD\_DAFL)

- Currently working on "Transformers for algorithmic Approximations" in collaboration with TCS-Research.
- Worked on a project titled "Iterative Knowledge Distillation on Data-Free Learning", done in collaboration with TCS-Research.

#### **BISAG** | SUMMER INTERN

May 2019 - Jul 2019 | Gandhinagar, India | Links: Project, Report

- The project, titled "Texture Segmentation", aimed at creating a Semantic Segmentation model for locating agricultural patterns specific to Horticulture.
- Created a novel Remote Sensing dataset from scratch and constructed a U-Net model using Keras after considering and experimenting with several other algorithms.

#### **PROJECTS**

#### **KD-LIB**

May 2020 | Links: Project, Pre-Print

- A Pytorch Library that will help extend all **Knowledge Distillation**, **Pruning and Quantization** works, and benchmark some of the best papers in these domains.
- I am the **project lead** for this library, which currently has **100+** stars.

#### **GENRL**

April 2020 | Links: Project

- GenRL is a PyTorch based **Reinforcement Learning library** centered around reproducible and generalizable algorithm implementations
- I have contributed to the **DQN** and **VPG** agents on the deep RL side and **SARSA** on the classical RL side. I have also contributed to **vectorized Environments**.

#### **SEGMENTING HUMAN MOTION SEQUENCES**

May 2020 - September 2020 | Remote

• Worked on a project to segment out human motion sequences, with a motion capture dataset consisting of **human-object** interactions as a remote collaborater at IAS Lab. TU-Darmstadt.

### TEACHING EXPERIENCE

## MACHINE LEARNING - TEACHING ASSISTANT (BITS F464)

Fall 2020

- Responsible for conducting the lab sessions for 120 undergraduate students in their pre-final year.
- Responsible for creating Project statements for the course.

### **PUBLICATIONS**

[1] A. Vaswani, R. Ganguly, H. Shah, S. R. S, S. Pandit, and S. Bothara. An autoencoder based approach to simulate sports games. 7th Workshop on Machine Learning and Data Mining for Sports Analytics at ECML-PKDD 2020, 2020.