# Neeraj Battan

NBH-231, Palash Nivas, IIIT Hyderabad Hyderabad, India (+91) 7093884118 ⋈ neerajbattan01@gmail.com DOB: November 20th, 1995

#### Education

2014-2020 International Institute of Information Technology, Hyderabad, B. Tech. in Electronics and Communication and MS by Research in Computer Vision at CVIT, Course work included Computer Programming, Computer Vision, Natural Language Processing, Robotics and Electronics. CGPA: 7.36

2013 SMB Gita Senior Secondary School, Kurukshetra, Secondary School, .

Percentage: 80.4%

2011 SMB Gita Senior Secondary School, Kurukshetra, High School, .

CGPA: 9.8

## Experience

June Research Assistant at Center for Visual Information Technology, IIIT Hyderabad.

2018-Present Working under Dr. Avinash Sharma in 3D Human Action Recognition and Indexing and Retrieval of 3D videos.

2016-Present **Teaching Assistant**, *IIIT Hyderabad*.

Teaching Assistant for *Algorithms and Operating* and *Digital Logic and Processors and Systems* courses. Responsibilities include problem setting for quizzes and assignments, teaching lab sessions and answer script correction.

May-July **Software Engineering Intern**, *t-Hub*,.

2017 Worked as a Web Developer for building the t-Hub website.

## Projects

Monsoon 3D Videos Indexing and Retrieval, Computer Vision.

2018-present Working with Dr. Avinash Sharma on implementing a pipeline for indexing and retrieval of 3D videos.

Monsoon **Search Engine for Wikipedia**, *Information Indexing and Retrieval*.

2017 Created a search engine for Wikipedia for course Information Retrieval and Extraction.

Monsoon Machine Translation Quality Estimation, Information Indexing and Retrieval.

2017 We determined the quality of a machine translated text by predicting the HTER (Human-targeted Translation Error Rate) scores. The Dataset that we used contains English to Spanish and Spanish to English Translation.

Monsoon 3D Human Action Recognition using Human skeletal sequences, Machine Learning.

2017 Worked with Dr. Avinash Sharma on 3D Human Action Recognition on human skeletal sequences using different techniques like Graph Convolution Network(GCN) and different RNN techniques.

Monsoon Content Based Image Retrieval With Releavance Feedback, Machine Learning.

We developed an approach to CBIR based on certain features in an image and incorporated a relevance feedback using collaborative filtering as well.

Monsoon Human Action Recognition in RGB videos, Machine Learning.

Worked with Dr. Avinash Sharma on Human Action Recognition in RGB videos using different techniques like Spectral Graph clustering and 3D Convolution.

Monsoon **Human Pose Estimation**, Digital Image Processing.

2016 Worked with Dr. Vineet Gandhi to extracting the human pose using different image processing techniques.

Spring 2016 OpenGL, PyGame games, Computer Graphics.

Made 2D projection game using OpenGL and Donkey kong game using PyGame

### Achievements

ACM ICPC Member of team flying raijin which was ranked 10th in online round of International Collegiate

2018 Programming Contest conducted by ACM among 3000 teams all over India.

Codeforces Division 1 coder on Codeforces with 1965 rating (Current). Link for my profile.

Codechef Division 1 coder on Codechef with 2109 rating (Maximum). Link for my profile.

ACM ICPC Member of team flying raijin which was ranked 33th among 250 teams selected all over India in

2018 onsite round of International Collegiate Programming Contest conducted by ACM at Amritapuri.

kick start Ranked 752 in Google kick start Round B in 2019

Round B

2019

#### Relevant Courses

Computer Distributed Systems, Computer Vision, Statistical Methods in AI, Information Retrieval and

Science Extraction, Data Structures, Algorithms and Operating Systems, Computer System Organization, Optimization Methods, Digital Image Processing, Natural Language Processing, Game Design

and Engineering

Electronics Introduction to Robotics, Linear Algebra, Digital Logic and Processors, Digital Signal Processing,

Digital Logic Processors

Mathematics

#### Skills

Working C, Python, C++, PyTorch, GNU/Linux, Matlab, git

Knowledge

Past Django, PHP, Web2py, HTML, CSS, OpenGL

Experience

Sports Skills Won a Silver Medal by securing 8th rank among more than 100 athletes that participated in

2017, Won a Gold Medal as a part of Badminton Batch Team in 2018 and played for Basketball

batch team in 2019