

# Neeraj Battan

## 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 Relevance Feedback, Machine Learning.**
- 2016 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.**
- 2016 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

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## Achievements

- ACM ICPC 2018 Member of team flying\_raijin which was ranked 10th in online round of International Collegiate Programming Contest conducted by ACM among all India.
- Codeforces Division 1 coder on Codeforces with 1965 rating. [Link](#) for my profile.
- Codechef Division 1 coder on Codechef with 2109 rating. [Link](#) for my profile.
- ACM ICPC 2018 Member of team flying\_raijin which was ranked 33th in onsite round of International Collegiate Programming Contest conducted by ACM at Amritapuri.

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## Relevant Courses

- Computer Science Distributed Systems, Computer Vision, Statistical Methods in AI, Information Retrieval and Extraction, Data Structures, Algorithms and Operating Systems, Computer System Organization, Optimization Methods, Digital Image Processing, Natural Language Processing, Game Design and Engineering
- Electronics and Mathematics Introduction to Robotics, Linear Algebra, Digital Logic and Processors, Digital Signal Processing, Digital Logic Processors

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## Skills

- Working Knowledge C, Python, C++, PyTorch, GNU/Linux, Matlab, git
- Past Experience Django, PHP, Web2py, HTML, CSS, OpenGL
- 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