

Manvi Goel

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EDUCATION

IIIT DELHI

B.TECH. IN COMPUTER SCIENCE &
APPLIED MATHS
2016 - Present | CGPA: 7.96/10

MODERN CONVENT SCHOOL CBSE

2014-2015 | 94.2%

MODERN CONVENT SCHOOL CBSE

2013-2014 | CGPA: 10/10

INTERESTS

- Virtual Reality
- Augmented Reality
- Human Computer Interaction
- Machine Learning

COURSEWORK

- Data Structures and Algorithms
- Computer Vision
- Digital Image Processing
- Statistical Machine Learning
- Competitive Programming
- Probability and Statistics
- Scientific Computing
- Analysis and Design of Algorithms
- Dynamical Systems
- Discrete Mathematics
- Advanced Programming
- Real/Complex Analysis

LANGUAGES

- Python
- Java
- C++/C#
- MATLAB

TOOLS &

TECHNOLOGIES

- Unity3D
- Vuforia
- Android Studio
- OpenCV
- PyTorch

PROJECTS

VIRTUAL REALITY FOR EDUCATION August 2019 – Present

Guide: Dr. Pushpendra Singh

Currently working on developing a VR based system to provide better educational training and compare results from existing classroom training techniques.

SELF DEFENSE IN VIRTUAL REALITY Jan 2019 – September 2019

Guide: Dr. Aman Parnami

Worked on creating VR based shared environment for the users to experience haptic, visual and audio feedback in virtual reality to better prepare them both physically and mentally in a sexual harassment situation.

AUGMENTED REALITY BASED CONSTRUCTION TOOLKIT FOR CHILDREN May 2018 – Dec 2018

Guide: Dr. Aman Parnami

Worked on developing an AR based application and Computer Vision based marker designs for pattern recognition for a physical-digital construction toolkit for children consisting of tangible modules with input/output functionality for interactive learning experiences in a shared environment.

LOW LIGHT OBJECT CLASSIFICATION Jan 2019 - April 2019

Guide: Dr. Mayank Vatsa

Worked on improving existing low-light image classification techniques using a pre-processing pipeline and evaluated the effects of different algorithms.

EXPERIENCE

MATHWORKS | SOFTWARE INTERN

May 2019 – June 2019

- Worked on code gen technology to optimize Image Processing Toolbox and Computer Vision algorithms in MATLAB and C using automated driving portable code generation support.

IIIT DELHI | TEACHING ASSISTANT

Jan 2020 – Present

- Teaching Assistant for the course Analysis and Design of Algorithms (ADA).

PUBLICATIONS

- J. Arora, K. Mathur, M. Goel, P. Kumar, A. Mishra, A. Parnami. 2019. Design and Evaluation of DIO Construction Toolkit for Co-making Shared Constructions Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (PACM IMWUT) Issue 4 (doi>10.1145/3369833).

AWARDS AND ACHIEVEMENTS

- Grace Hopper Celebration 2019, Orlando, Florida Scholar by Anita B.org
- Received Google student travel scholarship to attend GHCI 2019, Bangalore, India
- Dean's list of Student Affairs 2018-19- Leadership award
- Dean's recommendation for Student Council member/mentor 2019-20

POSITIONS OF RESPONSIBILITY

- Student Council | President April 2018 - April 2019
- Student Mentor April 2018 - March 2019
- Student Induction | Coordinator May 2018 - Aug 2018
- TEDxIIITD | Ambience Manager Oct 2017 - March 2018