

# SHIVAM PRASAD

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## EDUCATION

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**Indian Institute of Technology, Ropar**  
B.Tech in Computer Science & Engineering  
Current GPA: 8.66/10

*July 2017 - Present*

### CISCE

ISC(Class 12): 95%

ICSE(Class 10): 96.8%

## TECHNICAL STRENGTHS

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### Computer Languages

C/C++, Java

### Tools/OS

Android Studio, MATLAB, OpenCV, Git, Linux

## PROJECTS

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### Ported Code for Robust Heart Rate Measurement from MATLAB to Android App

*Android Studio, Java, OpenCV, Matlab*

*May 2018 - July 2018*

- Ported Dr. Antony Lam's and Dr.Yoshinori Kuno's MATLAB code for *Robust Heart Rate Measurement from Video Using Select Random Patches* to Android.
- Used OpenCV for face detection using pretrained HAAR Cascade Classifiers and image data processing.
- Wrote Java code for some MATLAB functions and OpenCV image data processing from scratch.
- Implemented matrix operations in Java using Apache Commons Math library.
- Project was supervised by Dr. Abhinav Dhall.

### K Means for Character Array in C

- Wrote a program from scratch for applying K-Means Clustering Algorithm and Logistic Regression on Character-Array in C.
- Used for filtering spam messages from non-spam messages.
- Trained and Tested on a subset of NUS SMS Corpus.

### Other Projects

- Implemented Quine-McCluskey algorithm for logic minimization in C++.
- Automated Service Robot using Raspberry Pi. (Ongoing Project)

## RELEVANT COURSES

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### Computer Science

Data Structures, Digital Logic Design

### Mathematics

Calculus, Linear Algebra, Discrete Mathematics, Differential Equations

### Others

Signals and Systems

## POSITIONS OF RESPONSIBILITY

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### Coding Club Coordinator

*August 2018 - Present*

- Conduct regular coding sessions for juniors and organise regular coding contests.

### Quizzing Club Representative

*August 2018 - Present*

- Organise club sessions and participate in quizzing events.

## MISCELLANEOUS

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### JEE Rank

Secured rank 1882 (Out of 1.5 million candidates) in Joint Entrance Exam, 2017.

### Volunteer Work

Worked as a part of event management team in college fests.  
Volunteered for Baja Sae India.