

# Arnav Garg

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## EDUCATION

### IIT KANPUR, CGPA: 8.6

B.TECH IN CIVIL ENGINEERING  
Expected April 2020 | Kanpur, India

### DPS REWARI

CLASS XII, CBSE-AISSCE  
PERCENTAGE: 97%  
CLASS X, CBSE-AISSCE  
CGPA: 10.0/10.0

## LINKS

Github:// [garnav98](#)  
LinkedIn:// [arnav-garg](#)  
Visit my site:// [Arnav Garg](#)

## COURSEWORK

- Fundamentals of Computing
- Multivariate Calculus
- Linear Algebra and ODE
- Partial Differential Equations
- Applied statistics and probability \*
- Introduction to Electronics \*
- Communication Skills

## SKILLS

### PROGRAMMING

- C/C++ • Python • ROS • OpenCV
- Shell Scripting • Bash Scripting
- ActionLib • Scikit-Learn • Sublime
- Github •  $\LaTeX$  • Arduino

### SIMULATION

- Solidworks • Fusion • Gazebo

### PLATFORMS

- Windows • Linux(Ubuntu)

## EXTRACURRICULAR

## ACTIVITIES

- Junior executive, E-summit; entrepreneurial fest of IITK
- 3rd posn. in Robotricks, TAKNEEK'16 (Sci. & Tech. championship)
- 2nd Posn. in Backdrop, GALAXY'16 (Cultural championship)

## SELECTED PROJECTS

### AUV-IITK ( AUTONOMOUS UNDERWATER VEHICLE ) \* |

SOFTWARE SUBSYSTEM UNDER PROF. SACHIN Y. SHINDE | FEBRUARY 2017

#### – PRESENT

- Designed and tuned a PID based controller for the robot's five degrees of freedom using ROS and arduino.
- Cleaned and documented the code for the previous vehicle 'varun'.
- Aiming to participate in SAUVC'18 (Singapore), an international competition of Autonomous Underwater Vehicles.

### MAIL-CLASSIFIER | MACHINE LEARNING

May 2017 – July 2017 | Programming Club IITK

- Created a classifier capable of segregating e-mails into desired sub-categories like sports, education, music, etc. using scikit modules.
- Optimized the code using different algorithms like 'naive-bayes', 'SVM' etc. to reach an accuracy of above 90%.
- All code was reviewed, perfected, and pushed.

## AWARDS AND FELLOWSHIPS

- All India Rank-2943 (top 1.5%) in Joint Entrance Examination-2016 (Advanced) among 1.5 Lakh candidates.
- All India Rank-713 (top 0.05%) in Joint Entrance Examination-2016 (Main) among 15 Lakh candidates.
- 100% (top 0.1%) in Mathematics(Class XII), received merit certificate.
- National Talent Search Examination, Qualified for National-level (pre-final) round.

## POSITIONS OF RESPONSIBILITY

- Academic Mentor, Counselling Service, IIT Kanpur:
  - Mentoring over 100 students in the course of "Introduction to Mechanics" and ensuring their adjustment in the subject.
  - Personally mentoring three students facing academic difficulties on a one-to-one basis, helping them avoid failing the course.
- Student Guide under Counselling Service, IIT Kanpur: Assisted 6 freshmen students in adjusting to the college environment.
- Secretary, Robotics Club:
  - Organized and contributed to the club workshops, lectures, talks.
  - Guided 6 teams during TAKNEEK'17 (Sci. & Tech. championship) to successfully participate in the event.

\*Ongoing