

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%

Grad. May 2016 | Rewari, India

CLASS X, CBSE-AISSCE

CGPA: 10.0/10.0

May 2014 | Rewari, India

LINKS

Github:// [garnav98](#)

LinkedIn:// [arnav-garg](#)

COURSEWORK

- Fundamentals of Computing
- Multivariate Calculus
- Linear Algebra and ODE
- Partial Differential Equations
- Communication Skills

SKILLS

PROGRAMMING

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

SIMULATION

- Solidworks • AutoDesk 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

- Built Institute's first AUV. A vehicle capable of following distinctly-colored lines, shoot torpedoes and drop markers autonomously using sensor data and computer vision, which has been integrated using Robot Operating System (ROS).
- Implemented Motion-planning using PID, Dynamic-Reconfiguration to avoid run-time compilation of code and optimized the code to reach the target in minimum time possible.
- 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