

Vaibhav Agarwal

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EDUCATION

IIT KHARAGPUR
B.TECH IN COMPUTER SCIENCE
AND ENGINEERING
2014-Present | CGPA: 8.6/10.0

**MAHATMA HANSRAJ MODERN
SCHOOL, JHANSI (CBSE)**
SENIOR SECONDARY GRADE 12
Overall: 95.4%

**CHRIST THE KING COLLEGE,
JHANSI (ICSE)**
SECONDARY GRADE 10
Overall: 94%

LINKS

Github:// [VaibhavAgarwalVA](#)
LinkedIn:// [VaibhavAgarwalVA](#)
CodeChef:// [infiniticoder](#)

CS COURSEWORK

Algorithms 1, Algorithms 2 *
Software Engineering
Computer Organization *
Programming and Data Structures
Compilers *, Automata Theory
Discrete Structures
Linear Algebra *, Graph Theory *
Probability and Statistics
Switching Circuit and Logic
(* denotes ongoing courses)

SKILLS

PROGRAMMING LANGUAGES
C/C++ • Java • Python • C# •
php

OPERATING SYSTEMS
Ubuntu • Microsoft Windows

UTILITIES
Git • Linux Shell • OpenCV •
GDB • \LaTeX • Docker

INTERESTS

Algorithms and Graph Theory
Robotics
Data Analytics
Artificial Intelligence
Competitive Programming
Software Testing

AWARDS AND ACHIEVEMENTS

2014 All India Rank 217 , JEE Advanced, among 150,000 candidates
2014 All India Percentile 99.99 , JEE Mains, among 1.5 million candidates
2016 RoboCup 2016, Germany Represented IIT Kharagpur
2015 ACM ICPC Asia Amritapuri Regionals finalist
2014 Academic Achievement Award IIT Kharagpur
2015 FIRA 2015, South Korea Bronze Medal for IIT Kharagpur
2013 KVPY (Govt. of India) scholarship awardee
2010 National Talent Search (Govt of India) scholarship awardee

EXPERIENCE AND PROJECTS

UNDERGRADUATE RESEARCHER | May'16-July'16
Indian Institute of Technology Kharagpur

- Developed positioning module for humanoid robots using Voronoi cell method and dynamic role assignment using maximum bipartite matching Hungarian algorithm.
- Integrated successfully. Increased time efficiency by 30%.
- Participated in RoboCup 2016, Germany.

UNDERGRADUATE RESEARCHER | May'15-July'15
Indian Institute of Technology Kharagpur

- Created a path planner for differential drive autonomous robots.
- Decreased slip parameter to less than 1%.
- The team won Bronze at FIRA 2015, South Korea.

SOFTWARE DEVELOPER Meghnad Saha Hall | Jan'16 - Present

- Created a software to extract details from a plot and tabulate them using OpenCV libraries and tesseract.

BACK END DEVELOPER Game Theory Society, IIT Kharagpur

- Contributed to back end of an online game made using CodeIgnitor framework in php.
- Played by over 1000 participants from across India.

IMAGE PROCESSING MENTOR IIT Kharagpur | Dec'15

- Mentored over 50 students in IEEE certified workshop.
- Taught various image processing techniques and algorithms.

CODE CLUB Programming Mentor | IIT Kharagpur

- Problem setter and tester in coding contests at IIT Kharagpur.
- Mentored over 100 students in algorithms and data structures.
- Provided logistics support for Bitwise 2016, which saw the participation of over 1000 programmers across the globe.

GRID FOLLOWER Robotics Workshop, IIT Kharagpur | Dec'14

- Attended Texas Instruments certified workshop and built an autonomous grid follower robot.
- Programmed the algorithm using DFS traversal to cover the entire grid in Atmel Studio.

MISCELLANEOUS

- Head of Algorithmic Game Society, IIT Kharagpur.
- Attended RoboCup Symposium at Leipzig, Germany.
- Occasional contributor to OPEN SOURCE (my Github account)
- Sub Head of Maths Olympiad Team at MS Hall, IIT Kharagpur.
- Winner at several programming contests.
- Sporadic blogger at my personal blog (*An IITian's theory of life.*).