

Vaibhav Agarwal

Computer Science and Engineering, IIT Kharagpur

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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 • x86 Assembly

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
- 2015 FIRA 2015, South Korea Bronze Medal for IIT Kharagpur
- 2016 RoboCup 2016, Germany Represented IIT Kharagpur
- 2015 ACM ICPC Asia Amritapuri Regionals finalist
- 2014 Academic Achievement Award 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
Kharagpur RoboSoccer Students' Group, IIT 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
Kharagpur RoboSoccer Students' Group, IIT 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.

UNDERGRADUATE RESEARCHER | Aug'16-Present
Smart Wireless Applications and Networking Group, IIT Kharagpur

- The group, under the School of Information Technology IIT Kharagpur, works in the field of IoT and nano networks.
- Working on bacterial nano networks and its applications in the world of IoT.

SOFTWARE DEVELOPER OpenSoft, IIT Kharagpur | Spring '16

- Created a software to extract details from a plot and tabulate them using OpenCV 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 using Atmel Studio.
- Programmed the algorithm using DFS traversal to cover the entire grid.

MISCELLANEOUS

- Attended RoboCup Symposium at Leipzig, Germany.
- Head of Algorithmic Game Theory Society, IIT Kharagpur.
- Sub Head of Maths Olympiad Team at MS Hall, IIT Kharagpur.
- Occasional contributor to Open Source. (my Github account)
- Winner at several programming contests.