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 Strcutures
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

HACKATHONS

Microsoft Build The Shield 2016
(1st position in IIT Kharagpur)
Microsoft Code.Fun.Do 2015
Microsoft Code.Fun.Do 2014
Flipkart OverNight Hackathon 2015

LANGUAGES

Hindi Matra-Bhasha !!
English Professional Proficiency
German kann sprechen !

AWARDS AND ACHIEVEMENTS

2015	**ACM ICPC Asia Amritapuri Regionals** finalist
2015	**FIRA 2015, South Korea** Bronze Medal for IIT Kharagpur
2016	**RoboCup 2016, Germany** Represented IIT Kharagpur
2016	**CodeChef SnackDown 2016 Pre-finalist** Top 300 in 9000+ teams
2014	**All India Rank 217** , JEE Advanced, among 150,000 candidates
2014	**All India Percentile 99.99** , JEE Mains, among 1.5 million candidates
2014	**Academic Achievement Award 2014-15** IIT Kharagpur
2013	**KVPY** (Govt. of India) scholarship awardee
2010	**National Talent Search** (Govt of India) scholarship awardee
2014	**Indian National Olympiads (Physics & Chemistry)** Top 300 in India
2014	**Aditya Birla Scholarship 2014** Shortlisted, among top 30 from all IITs

EXPERIENCE AND PROJECTS

Software Developer and 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.

Software Developer and 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 tessaract.

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 (institute funded).
- 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 of Open IIT Maths Olympiad 2014-15 and 2015-16 at IIT Kharagpur.