VAIBHAV AGARWAL | 14CS10050
COMPUTER SCIENCE & ENGG. (B.Tech 4Y)

Email : vaiagarwal96@gmail.com
Contact : 9734523790

EDUCATION

B.TECH	IIT Kharagpur	8.60 / 10	2018
Central Board of Secondary Examinations (CBSE)	Mahatma Hansraj Modern School, Jhansi	95.4%	2014
Indian School Certificate Examinations (ICSE)	Christ the King College, Jhansi	94%	2012

SKILLS AND EXPERTISE

Proficient : C, C++, Java   Intermediate : Python, HTML, MySQL, C#
Tools : Git, OpenCV, Unity   OS : Windows, Linux
Courses : Software Engineering, Algorithms 1, Discrete Structures, Programming and Data Structures, Switching Circuits and Logic Design, Automata Theory, Algorithms 2*, Compilers*, Graph Theory*, Computer Architecture*.   * means ongoing course.

ACADEMIC PROJECTS

Kharagpur RoboSoccer Students' Group (KRSSG) :

KRSSG is a SRIC sponsored research group with an ambitious aim to make autonomous bots play football better than humans. The team comprises of over 50 undergraduate students from all years of study spread over 3 teams (Software, Embedded, Mechanical).
Work Profile : Researcher and Software Developer (since February 2015)
Work Overview:
1. Robocup, 3D Simulation League (2016) : Implemented team formation for humanoid robots using Voronoi Cells - Delaunay Triangulation method and dynamic role assignment using the Hungarian Algorithm. Developed strategies and tactics for gameplay from scratch. Devised suitable algorithms to prevent bot collision and facilitate multi-agent passing.
2. FIRA, Mirosot Event (2015) : Implemented path planning for autonomous differential drive robots using the Dynamic Window Algorithm. Devised strategies using the skills-tactics-plays architecture.

Online Sales Portal

Term Project under Prof Partha Pratim Das, Software Engineering Laboratory, Spring 2016. Language : Java.
Created a software which allows users to buy and sell items to different users. They can buy, sell, modify, upload and view items on sale and also mange their account details.

CERTIFICATIONS

Problem Solving Assessment 2013

Secured 99.95 percentile in Quantitative Aptitude section of PSA 2013 exam conducted by CBSE.

Code Fun Do

Participated in the Microsoft Code Fun Do hackathon 2014-15 and 2015-16. Completed a C# app on both occasions. Grew familiar with Unity software as well.

AWARDS AND ACHIEVEMENTS

RoboCup 2016

Represented IIT Kharagpur in the RoboCup 2016 competition held in Leipzig, Germany.
"KgpKubs" made an outstanding debut by winning 8 matches and drawing another 9 against experienced teams from China and Brazil.

Federation of International RoboSoccer Association (FIRA) 2015

Bronze position winning team member in the MiroSot event of FIRA 2015 held in Daejeon, South Korea.

ACM ICPC Asia Amritapuri Regionals 2015

Regional Finalist in the ACM ICPC Asia Amritapuri Regional Contest 2015.

IIT JEE Advanced 2014

Secured All India Rank 217 in Joint Entrance Examination (JEE) Advanced 2014.

Gorelal Syngal Scholarship 2014

Awarded the Gorelal Syngal Scholarship 2014 by IIT Kharagpur for outstanding academic performance.

IIT JEE Mains 2014

Secured 313/360 marks (Percentile : 99.99) in Joint Entrance Examination (JEE) Mains 2014.

Kishore Vaigyanik Protsahan Yojana 2014

Selected for KVPY Scholarship 2014 organised by IISc Bangalore.

National Talent Search Examination 2010

Selected for NTSE Scholarship 2010 organised by NCERT.

Homi Bhabha Centre for Science Education (HBCSE) Olympiads

Qualified the National Standard Examination in Chemistry & National Standard Examination in Physics in 2014. Placed among the top 1% students in the state of Uttar Pradesh.

Aditya Birla Scholarship 2014

Amongst the top 32 students from all IITs and BITS shortlisted for the Aditya Birla Scholarship programme 2014.

WORK EXPERIENCE DETAILS

Technology Robotix Society, IIT Kharagpur (November, 2015 - December, 2015)

Mentor : Taught freshers image processing algorithms and techniques during the winter workshop.

Code Club, IIT Kharagpur (January, 2016 - March, 2016)

Mentor : Taught freshers algorithms and data structures.

EXTRA CURRICULAR ACTIVITIES

Codechef Username : infiniticoder   Github Username : VaibhavAgarwalVA
1. Vice Captain of the Case Study Team of Meghnad Saha Hall, IIT Kharagpur. (Fall 2016)
2. Winner of the Open IIT Maths Olympiad 2015.
3. Finalist in the event Source Code held in Kshitij 2016, IIT Kharagpur.
4. Member of the KGPian Game Theory Society, IIT Kharagpur.
5. Member of Code Club, IIT Kharagpur. Organised Bitwise 2015 and 2016, which saw the participation of more than 500 students worldwide.
6. Student Volunteer at Alumni Cell and Spring Fest, IIT Kharagpur.