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B.TECH	IIT Kharagpur	9.07 / 10	2018
All India Senior School Certificate Examination	CBSE	92.4%	2014
All India Secondary School Examination	CBSE	10 / 10	2012

# **SKILLS AND EXPERTISE**

- 1. Interested in core chemical engineering subjects and hence have studied extensively for some courses from my side as well.

  2. Quick Learner. Since I have been doing research projects which require a lot of background knowledge, I have developed on my speed and ability to understand and work accordingly, quickly.
- 3. Very much comfortable with simulation softwares (GROMACS), designing and analysis softwares like (AutoCAD, COMSOL, SolidWorks, Sketchup) etc.
- 4. Extremely comfortable with computer skills with knowledge of programming languages(C, C++, JAVA), Web Development languages (HTML, CSS, BootStrap, JavaScript, PHP and XML) and Android app development (as a side hobby)
- 5. Extremely dedicated. Since I have been involved in research projects which require a lot of work and love the idea of core chemical engineering subjects, therefore dedication is a consequence by default.
- 6. Have experience in both experimental as well as computer based work due to the two varied projects I have worked on.

#### **ACADEMIC PROJECTS**

#### Study of molecular Dynamics Simulations on Structured Surfaces

It's a currently ongoing project involving study of droplet spreading as well as movement over wetting gradients (SAMs) and observing trends in properties. Systems are created using MATLAB and then the simulations are run on GROMACS followed by visual representation using VMD.

### Study of properties and regulation of Red Blood Cells while flow through micro channels

It's a currently ongoing project in association with University of Calcutta involving study of various properties of flow of RBCs through micro channels (viscous forces, inertial forces acting etc) as well as the phenomenon of self assembling of particles in a 2 phase microchannel system. I had started on this project as a research intern for the summers of the year 2016 and have now joined it over a long term course.

# **AWARDS AND ACHIEVEMENTS**

### Excellent performance in the subject of Chemistry in AISSCE 2014.

Owing to a score of 100/100 in AISSCE 2014 in the subject of chemistry the Ministry of Human resources and Development, govt. of India issued a certificate and a personalized letter. This was awarded to the top 1% of the 1029874 students who appeared for AISSCE 2014.

#### High distinction in Australian National Chemistry Quiz.

Australian National Chemistry Quiz is a Quiz organised by RACI (Royal Australian Chemical Institute) worldwide. I secured a position in the top 2% of the total number of participants).

# **POSITION OF RESPONSIBILITY**

### Executive Member, Kharagpur Open Source Society

KOSS aims to promote coding culture and love of open source throughout the campus. We conduct workshops and hackathons on a variety of topics. We also conduct internal sessions where members help each other hone their coding skills.

#### Firefox Student Ambassador

Responsible for completion of coding projects assigned as an FSA of the Firefox club, Conducting workshops and popularizing use of open source products.

## **WORK EXPERIENCE DETAILS**

#### IIT Kharagpur, Kharagpur (May, 2016 - July, 2016)

Research Intern: Worked as a research intern under the guidance of professsor Sunando Dasgupta of IIT Kharagpur and Debasish Sarkar of University of Calcutta. The work involved various experiments based on flow of RBCs through micro channels (2 phase microfluidic systems) and recording of observations followed by computations of various parameters done on MATLAB.

# **EXTRA CURRICULUR ACTIVITIES**

- 1. Vocals and synthesizer (Have participated in various competitions)
- 2. Table tennis (Quarter-finalist in inter-district Table tennis championship (state of West Bengal))
- 3. Swimming and badminton (No significant achievements)