

Saurav Shekhar

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Educational Qualifications

Year	Degree/Certificate	Institute(Board)	Performance
2012-Present	B-Tech	Indian Institute of Technology, Kanpur	9.2/10
2012	AISSCE, XII (CBSE)	JVM Shyamali, Ranchi	95.2%
2010	AISSCE, X (CBSE)	DAV Public School, Gumla	10.0/10

Scholastic Achievements

- Awarded the **Academic Excellence** award during the academic year 2012-13 by IIT Kanpur for exceptional academic performance
- Secured **All India Rank 958** in IIT-JEE 2012 among 5 lakh candidates
- Attained **All India Rank 554** in AIEEE 2012 among 12.5 lakh candidates
- Qualified **Regional Mathematics Olympiad (RMO)** 2012.
- Secured National **top 1%** in National Standard Examinations in Physics (**NSEP**) 2011-12, Chemistry (**NSEC**) 2011-12, and Astronomy (**NSEA**)

Internships and Projects

Real-time market data monitor

May '15-July '15

Summer Internship at Goldman Sachs, Bangalore

- Implemented various market data checks and improved market data subscription
- Abstracted out monitoring and alerting functionalities so that they can be used across multiple market data source systems
- Technology Used: Java, JNI, Bash, Reuters RFA API

Intelligent Surveillance System

May '14-July '14

Mentor: Prof. Harish Karnick

- Studied various methods for background subtraction and motion detection for selecting candidate frames that contain useful data in the surveillance video. Implemented a real time system for adaptive background subtraction using Gaussian Mixture Model.
- Extracted candidate license plate areas from the images and enhanced those using morphological operations.
- Implemented Viola-Jones Object detection framework for vehicle classification using OpenCV.

Technical Skills

Programming Languages: C, C++ (proficient), Java, Python, Haskell

Web Development: HTML, PHP, SQL

Others: Latex, Octave, Perl, Bash

Relevant Courses

- Computer Science** : Fundamentals of Computing, Data Structure and Algorithms, Computing Laboratory, Logic for Computer Science, Computer Organization, Operating Systems, Theory of Computation, Compilers, Randomized Algorithms, Approximation Algorithms, Functional Programming*
- Mathematics** : Discrete Math, Linear Algebra, Abstract Algebra, Probability and Statistics, Fundamentals of Calculus, Applied Stochastic processes*
(*:ongoing)

Co-Curricular Activities

- Secured 6th position among the top 25 teams selected for **Codechef Snackdown** onsite finale 2015.
- Secured position **11** and **20** among 6000 Indian participants in **Codechef July Challenge** and **June Challenge** 2014 respectively.
- Secured **1st position** in **IHPC**, Parallel Programming Contest at Techkriti -2013, Annual Tech Festival of IIT Kanpur
- Achieved **2nd position** in **Battlecity**, AI Programming Contest at Techkriti 2013, Annual Tech Festival of IIT Kanpur
- Advanced to Round 2 of **Facebook Hackercup 2014**, with global position **287**.
- Ranked **Candidate Master** with a peak rating of 1700+ on Codeforces.
- Won **Kodefest** and **WebDev**, Takneek 2013, the annual inter hall technical competition of IIT Kanpur.

Miscellaneous

- Secretary, Programming Club** (2013-2014) - Assisted in organizing programming competitions, took introductory lectures for freshmen. Also mentored a team of freshmen in their summer project on gesture recognition.
- Academic Mentor** (2013-2014) - Provided academic assistance to students of junior batches by taking hostel level classes and peer to peer mentoring.
- Judge TA** (2015-2016) – Made programming assignments and graded them for the course CS345 (Algorithms II) and ESO207 (DS)