

# Aneek Roy

## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Chittaranjan, West Bengal, India | 14<sup>th</sup> October 1995  
ADDRESS: 7/11, Chhayanat, Calcutta Greens, 1050/2, Survey Park, Kolkata - 700075  
PHONE: +91 8335837835, +91 7980261936  
EMAIL: [aneek.roy5@gmail.com](mailto:aneek.roy5@gmail.com)  
PROFILE LINKS: [LinkedIn](#), [Github](#), [Website](#)

## WORK EXPERIENCE

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AUGUST 2016 - AUGUST 2017 | Undergraduate Research Assistant  
*Jadavpur University, Department of Computer Science and Engineering*  
**Music Emotion Recognition Tasks on MIREX, Sound Tracks and Media-Eval datasets using regression and classification model**  
Guide : Dr. Sanjoy Kumar Saha, Professor, CSE Dept., Jadavpur University.  
Worked in Centre for Distributed Computing (CDC) Lab for improving classification accuracy. Achieved an improvement of 6-10% in accuracy over the state-of-the-art methods.

MAY-JULY 2017 | Student Trainee Engineering  
**Samsung Research and Development Institute, Bangalore**  
Mentor : Joysula Venkat Narasimham, Chief Engineer at SRIB, India  
My project was design and development of mechanism to enhance the Tizen Web Ecosystem for Samsung mobile devices. Enhancement was done by importing Google Web Store store apps to the Tizen ecosystem. It involved json and manifest parsing along-with settings, privilege and certificate management for both the systems for fully functional compliance from user perspective. Achieved an accuracy of about 90%.

JUNE-JULY 2016 | Undergraduate Summer Research Intern  
Electronics and Communication Sciences Unit, Indian Statistical Institute, Kolkata  
Project Title: **Mouse pointer manipulation system guided by hand gestures**  
Supervisor: Dr. Bhabatosh Chanda, ECSU, ISI, Kolkata  
Mentor : Sanchayan Santra, Senior Research Fellow, ECSU, ISI, Kolkata  
This project was done as a part of Summer School on Computer Vision, Graphics and Image Processing, organized by the ECSU dept. of ISI, Kolkata. The project involved real time detection of hand gestures and tracking the fingers to manipulate the mouse pointers. | [Presentation](#) | [Video](#) | [Project Report](#)

SUMMER 2015 | Undergraduate Summer Research Intern  
R.C. Bose Centre for Cryptology, *Indian Statistical Institute, Kolkata*  
Project Title: **Distributed Approach for Batch wise GCD Computation of RSA Moduli**  
Guide: Dr. Sourav Sengupta, Lecturer cum Post Doctoral Fellow, CSRU, ISI, Kolkata.  
As a part of summer internship, I had to work in The Centre of Excellence in Cryptology (CoEC) Lab, on determining the Biases in Randomness of Public Keys generated using RSA encryption scheme. Collected 42 million HTTPs public certificates from internet. Used common factor attack to segregate the vulnerable moduli from entire collected dataset. Almost 0.4% sites are vulnerable due to shared primes in RSA. Developed a fully parallel processing method for batch wise GCD Computation.

## PUBLICATIONS

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Vineet Kumar, **Aneek Roy**, Sourya Sengupta and Sourav Sen Gupta "Parallelized Common Factor Attack on RSA" Paper accepted at 13th International Conference on Information System Security, IIT Bombay ,2017

Rajib Sarkar, Saikat Dutta, **Aneek Roy** and Sanjay Kumar Saha "Emotion Based Categorization of Music Using Low Level Features and Agglomerative Clustering" Paper Accepted at National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics, IIT Mandi, 2017.

## EDUCATION

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2014-Current Bachelor of Engineering in COMPUTER SCIENCE AND ENGINEERING  
**Jadavpur University**, Kolkata,India  
GPA:8.0/10.0 | [Detailed List of Exams and Grade Cards](#)

2014 Higher Secondary Examination (Class XII) **AISSE**  
**Central Board of Secondary Education**  
Bhavan's Gangabux Kanoria Vidyamandir,Kolkata  
PERCENTAGE: 95.6/100 | [Mark Sheet](#)

2012 Secondary Examination (Class X)**ICSE**  
**Council for the Indian School Certificate Examinations**  
Garden High School,Kolkata  
PERCENTAGE: 97.4/100 | [Mark Sheet](#)

## ACHIEVEMENTS

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JANUARY 2015 Designed a gesture Controlled droid using accelerometer and arduino.  
Won the 1<sup>st</sup> prize in college-level robotics competition.

JUNE 2014 Received Letter of Appreciation from  
HRD minister of India for being top 0.1% in CBSE.

2014 Top 1% of JEE-MAINS,JEE-ADVANCED,WBJEE competitive exams.  
WBJEE General Merit Rank - 270

## COMPUTER SKILLS

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Basic Knowledge: mysql, LINUX , ~~HT~~TeX,Nmap Scanning Software  
Intermediate Knowledge: OpenCV, Matlab  
High Level languages known : C, C++, Java(Basic),Python(Basic)

## INTERESTS AND ACTIVITIES

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Open-Source Software Development, Competitive Programming  
Computer Vision,Image Processing, Pattern recognition,Gesture Recognition

## UNDERGRADUATE COURSE WORK

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Data Structures and Algorithms,Object Oriented Programming,  
Operating Systems,Compilers,Database Management Systems, Computer Networks