# **Soumyadeep Thakur**

## PERSONAL DETAILS

**Date of Birth:** 24 Feb 1997 **Contact:** +91 8583036144

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## ACADEMIC BACKGROUND

## JADAVPUR UNIVERSITY, KOLKATA, INDIA | 2015 - Present (Expected to

Graduate: June, 2019)

**DEGREE: BACHELOR OF ENGINEERING** 

**DISCIPLINE: COMPUTER SCIENCE AND ENGINEERING** 

C.G.P.A: 9.11 S.G.P.A:

1st Year 1st Semester: 9.381st Year 2nd Semester: 9.562nd Year 1st Semester: 9.002nd Year 2nd Semester: 9.383rd Year 1st Semester: 8.753rd Year 2nd Semester: 9.12

## VIVEKANANDA MISSION SCHOOL, KOLKATA, INDIA | 2000 - 2015

**GRADUATED**: May 2015

Percentage score in I.S.C EXAMINATION 2015 (12th Standard): 98.25 Percentage score in I.C.S.E EXAMINATION 2013 (10th Standard): 97.00

## ACADEMIC AND RESEARCH EXPERIENCE

#### CREDIT CARD FRAUD DETECTION

POSITION: Undergraduate Researcher INSTITUTE: Jadavpur University, Kolkata SUPERVISOR: Dr. Sanjoy Kumar Saha PERIOD: October 2018 - May 2018

**DESCRIPTION:** 

• Detecting fraud from credit card transaction stream using machine learning techniques.

#### ANDROID MALWARE DETECTION

**POSITION**: Mitacs Globalink Research Intern

**INSTITUTE:** University of British Columbia, Vancouver

**SUPERVISOR:** Dr. Julia Rubin **PERIOD:** May 2018 - August 2018

**DESCRIPTION:** 

• Analysed malicious Android apps that were already published to the Google Play Store and tried to figure out what caused them to bypass Google malware analysis techniques.

- Created an app that can have a potential malicious payload and submitted it to Google. Our app was published to the Play Store and we were able to identify how Google analyses apps submitted to the Play Store.
- Planned a malware analysis tool that uses Trace Equivalence to identify malwares dynamically.

## FREQUENT ITEMSET MINING FROM TRANSACTIONAL DATA STREAM

POSITION: Undergraduate Researcher INSTITUTE: Jadavpur University, Kolkata SUPERVISOR: Dr. Sanjoy Kumar Saha PERIOD: July 2017 - April 2018

**DESCRIPTION:** 

- Designed a window based approach to mining recently frequent co-occurring items from a fast transaction stream with the aim of reducing the space complexity, and also exploiting parallelism in processing the data.
- Studied the possibility of predicting higher sized frequent itemsets from the smaller ones determined by our algorithm.
- Studied the possible efficient data structures that can be used for storing the in-memory data during processing

#### KEY PRE-DISTRIBUTION IN WIRELESS SENSOR NETWORKS

**POSITION**: Undergraduate Researcher

**INSTITUTE:** Indian Statistical Institute, Kolkata

**SUPERVISOR:** Dr. Bimal Roy **PERIOD:** May 2017 - July 2018

**DESCRIPTION:** 

- Studied the security aspects including resiliency against node capture attacks of existing key pre-distribution schemes in Wireless Sensor Networks.
- Designed a key pre-distribution scheme for WSNs having high edge and vertex resiliency against random node capture attacks and performed simulations to verify the results

### PROGRAMMING SKILLS

PROFICIENT: C • C++ • Java

**COMFORTABLE:** Python • bash • git • SQL • Octave • Android

### AWARDS AND ACHIEVEMENT

**2015**: Stood 5th in Jontro Tontro, a robotics competition for freshmen organized by Jadavpur University Science Club

**2014:** Among Top 300 candidates from India who qualified for INChO (Indian National Chemistry Olympiad)

**2014:** Qualified for Kishore Vaigyanik Protsahan Yojna (KVPY) Fellowship, KVPY SA 2013 with an All India Rank of 145

2011: State Topper Award, International Informatics Olympiad organised by Computer

Literacy Foundation, New Delhi

**2011:** 3rd position among Class IX students of our School - TTIS Science Quest **2009:** 2nd position in class, 5th position in State - International Informatics Olympiad organised by Computer Literacy Foundation, New Delhi