# Shailpik Roy

https://www.shailpik.co sroy15@illinois.edu 904 W Green St. Urbana IL 61801 (217) 819-8177

## **EDUCATION**

## **UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN**

URBANA, IL, USA

B.S. in Computer Science August 2014 - May 2017 (Expected) James Scholar & Dean's List GPA: 3.91/4.0 Technical GPA: 4.0/4.0

#### SOUTH POINT HIGH SCHOOL

KOLKATA, INDIA

August 2000 - May 2014 SAT: 2210/2400 SAT Subject Tests: Math II 800/800 Physics 800/800 Chemistry 800/800

## COURSEWORK

Systems Programming (CS 241) **Data Structures** (CS 225) Computer Architecture (CS 233) **Database Systems** (CS 411) **Discrete Structures** (CS 173)Intro to CS and Honors (CS 125 and 196) Linear Algebra (MATH 415) Multivariable Calculus (MATH 241) **Probability and Statistics** (MATH 463)

## SKILLS

Proficient:

C • C++ • Java • Python

Familiar:

MySQL • HTML • CSS JavaScript • Android Dev

## **EXPERIENCE & PROJECTS**

#### **RESEARCH WORK** | STUDENT RESEARCHER

August 2013 – May 2014

- Research work under Prof. Kuntal Ghosh at Indian Statistical Institute. Kolkata on identification of micro-calcifications in mammography images
- Developed a unique algorithm involving contrasting illusions and proposed a theory for explaining the 2 illusions simultaneously
- Implemented this theory for enhancing micro-calcifications, edge detection methods, and a Gaussian filter for identifying the same in mammograms

#### FREED | BACKEND DEVELOPER

February 2015

- Developed an Android Application at HackIllinois for crowdsourcing data to inform people about available parking spots
- Extensively integrated Google Maps and Facebook APIs into the application

#### VIRTUAL LENS | Android App Developer

August 2014 - December 2014

- Developed an Android camera application helping people with farsightedness by emulating a natural window and mimicking a lens
- Utilised facial detection and object-camera distance Algorithms for selectively zooming in objects

### AWARDS & ACHIEVEMENTS

#### **DEAN'S LIST** | ACADEMIC ACHIEVEMENT

Fall 2014 & Spring 2015

- Awarded to the top 10% students in the College of Engineering
- James Scholar and on the Dean's List for Fall 2014 and Spring 2015

## INTEL ISEF FAIR 2014 | GOLD MEDAL WINNER & FINALIST

May 2014

- Won Gold Medal at Intel IRIS National Fair 2013 & represented India at Intel ISEF 2014 in Los Angeles
- Currently involved in publishing a paper on the same research involving microcalfication identification

#### NTSE SCHOLAR | NATIONAL MERIT SCHOLAR

October 2010 - May 2014

- Selected as National Scholar pan-India by NCERT program of Govt. of India from 2010-2014.
- Awarded the NTSE Scholarship for outstanding performance in Math, Physics, Chemistry