# Shailpik Roy

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#### **FDUCATION**

# UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

URBANA, IL, USA

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

#### SOUTH POINT HIGH SCHOOL

KOLKATA, INDIA

SAT: 2210/2400 SAT Subject Tests: Math II 800/800 Physics 800/800 Chemistry 800/800

### COURSEWORK

August 2000 - May 2014

Intro to CS and Honors (CS 125 and 196) Discrete Structures (CS 173) **Data Structures** (CS 225) Computer Architecture (CS 233) System Programming (CS 241) (Fall 2015) Database Systems (CS 411) (Fall 2015) Linear Algebra (MATH 415) Multivariable Calculus (MATH 241) Probability and Statistics (MATH 463)(Fall 2015)

#### SKILLS

Proficient:

C++ • Java • C • Python

Familiar:

MySQL • HTML • CSS JavaScript • Android

#### **EXPERIENCE & ACTIVITIES**

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

August 2013 - May 2014

- Research work under Professor Kuntal Ghosh at Indian Statistical Institute
- Worked on a research project revolving around 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 | HACKILLINOIS ANDROID APP PROJECT

February 2015

- Developed an Android Application that crowdsources data and informs people about available parking spots
- Utilised Google Maps API and Facebook API for the application

#### VIRTUAL LENS | ANDROID APP DEVELOPER

August 2014 - December 2014

- Developed an Android camera application for emulating a natural window and mimicking a lens
- Utilised face detection and Object Camera Distance Algorithms for selectively zooming in objects which is of use to people with farsightedness

### AWARDS & ACHIEVEMENTS

#### **DEAN'S LIST** | Honor's Student on the Dean's List

Fall 2014 & Spring 2015

• James Scholar and on the Dean's List for Fall 2014 and Spring 2015

## **INTEL ISEF FINALIST** | Represented India at Intel ISEF 2014 May 2014

- Won Gold Medal at Intel IRIS National Fair 2013 and was selected to represent India and participate at Intel ISEF 2014 in Los Angeles for the Research Project involving microcalfication identification
- Currently involved in publishing a paper on this research

#### NTSE SCHOLAR | NATIONAL SCHOLAR

October 2010 - May 2014

• Selected as National Scholar pan-India and awarded the NTSE Scholarship (National Talent Search Examination) by NCERT (National Council of Education Research and Training) program of Govt. of India, 2010.