

# APOORVAA DESHPANDE

---

Graduate Student  
Department of Computer Science  
[Brown University](#)

115 Waterman Street  
Providence, RI - 02912  
[apoorvaa\\_deshpande@brown.edu](mailto:apoorvaa_deshpande@brown.edu)

## RESEARCH INTERESTS

---

Cryptography, Security, Complexity Theory

## EDUCATION

---

[Brown University](#), Providence, RI, USA

Ph.D. [*August 2014* - ]

Department of Computer Science

*Advisor: Prof. Anna Lysyanskaya*

[BITS Pilani University](#), Goa Campus, INDIA

M.Sc. (Hons) Mathematics + B.E. (Hons) Computer Science [*August 2008* - *May 2013*]

Department of Mathematics and Department of Computer Science

CGPA (core) = 9.10/10.0, CGPA (overall) = 8.74/10.0

## PUBLICATIONS

---

### **Automated Inventory Management and Security Surveillance System using Image Processing Techniques** [\[pdf\]](#)

Adwait Gandhe, Apoorvaa Deshpande, Sourabh Bodas and Jyothisnaa Sivaraman

*IEEE proceedings of TENCN, November 2010, Fukuoka City, Japan*

### **Constrained Pseudorandom Functions for Unconstrained Inputs**

Apoorvaa Deshpande, Venkata Koppula, Brent Waters

*Advances in Cryptology - EUROCRYPT 2016 - 35th Annual International Conference on the Theory and Applications of Cryptographic Techniques, Vienna, Austria*

## OTHER EXPERIENCES

---

**Graduate Student Visitor**, [Simon's Institute](#), Berkeley

*May-August, 2015*

Invited visitor for the summer program on *Cryptography*

**Research Internship**, [Microsoft Research](#), India

*July-Dec, 2013*

*Project: Password Authenticated Secret Sharing*

*Advisor: Raghav Bhaskar*

**Masters Thesis**, [Centre de Recherche, INRIA](#), France

*July-Dec, 2012*

Verification of Equivalence Properties in Cryptographic Protocols     [Steve Kremer](#) & [Stephanie Delaune](#)

**External Reviewer**, [Indocrypt 2015](#)

*December, 2015*

## SCHOLARSHIPS

---

- Awarded *Grad Cohort Scholarship* by the Computing Research Association (2015)

- Awarded *Google Anita Borg Memorial Scholarship* for the Asia-Pacific region (2013). This scholarship was awarded to 25 students from all over Asia, Australia and New Zealand.

## ACADEMIC ACHIEVEMENTS

---

- Ranked *One* in the Department of Mathematics, BITS Pilani, Goa in a batch of 50
- Awarded *Summer Research Fellowship* by IAS (Indian Academy of Sciences) for the year 2011
- Awarded *Best Paper Prize* in the Paper Presentation Event at *ICARUS* (Indian Conference for Academic Research by Undergraduate Students), IIT Kanpur, Feb 2010

## SELECTED COURSES

---

Information Theory, Multiprocessor Synchronization, Advance Probabilistic Methods, Advance Topics in Cryptography, Topics in Computer Security

## TEACHING EXPERIENCE

---

- *Teaching Assistant* for CSCI 1510 **Introduction to Cryptography** (Spring 2016) for Department of Computer Science, Brown University
- *Mentor* for **Introduction to Computer Science** for 4 high school students in summer 2016
- *Professional Assistant* AAOC C221 **Graphs & Networks** (Fall 2011) for Department of Mathematics, BITS Pilani University

## POSITIONS OF RESPONSIBILITY

---

- Worked as *Student Coordinator* for faculty hiring at Department of Computer Science, Brown University [Spring 2015]
- Worked as *Student Mentor* for the *Academic Counselling Cell* of BITS Pilani

## EXTRA CURRICULAR ACTIVITIES

---

- Awarded the prestigious CCRT (*Centre for Cultural Resources and Training, Central Govt. of India*) Scholarship for Hindustani Classical Music. The scholarship is awarded after rigorous tests and interviews and is renewed every two years. (since 2001)
- Attained the degree of *Sangeet Visharad* (Equivalent to Bachelors Degree) in Hindustani Classical Vocal Music - Distinction Class
- Rendered songs for several music albums and films
- Trained in Indian Classical Dance *Odissi* for 7 years