

# Rajaditya Mukherjee

PHD STUDENT IN COMPUTER GRAPHICS

Dreese Laboratories 2015 Neil Ave. Columbus OH 43201 USA

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Seeking a challenging software engineering internship position for the summer of 2017

## Education

### The Ohio State University

Columbus, OH

PHD IN COMPUTER SCIENCE AND ENGINEERING

Aug. 2012 - May 2018(Expected)

- Major in Computer Graphics, Minor in AI and Algorithms, CGPA : 3.98/4.00

### Jadavpur University

Kolkata, India

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING

Aug. 2007 - Aug.2011

## Professional Experience

### Walt Disney Animation Studios

Burbank, CA

TECHNICAL SUMMER INTERN - DISNEY RESEARCH

May 2016 - Aug. 2016

- Researched the feasibility of a novel collision resolution algorithm for Disney's inhouse cloth simulation product.
- Technologies** : C++, Parallel Solvers, Numerical Computing

### Styku Inc.

Los Angeles, CA

CLOTH SIMULATION INTERN

May. 2014 - Jul. 2014

- Fixed several multi-threaded bug in the CUDA-based Cloth Solver.
- Implemented algorithms for improving collisions as well as dynamics for cloth simulation.
- Technologies** : C++, CUDA

### Synopsys India Pvt. Ltd.

Bangalore, India

R & D ENGINEER I

May. 2011 - Jul. 2012

- Implemented a unified messaging infrastructure for our product.
- Implemented from scratch, a compiler for a separate power architecture description language.
- Technologies** : C++, Verilog

## Technical Skills

**Programming Proficiency** C,C++,Java,Python,PHP,Javascript

**Graphics API** OpenGL { Core and GLSL 4.0 }

**Parallel Programming API** CUDA, OpenMP

**Artificial Intelligence** cuDNN, TensorFlow

**Numerical Computing** NumPy, SciPy, Intel MKL, MATLAB, Mathematica, BLAS

## Publications

R. Mukherjee, H. Wang *Interactive Two-Way Shape Design of Elastic Bodies Under Submission*

R. Mukherjee, X. Wu, H. Wang *Incremental Deformation Subspace Reconstruction Computer Graphics Forum (Pacific Graphics 2016)*

X. Wu, R. Mukherjee, H.Wang *A Unified Approach for Subspace Simulation of Deformable Bodies in Multiple Domains ACM Transactions on Graphics (SIGGRAPH Asia 2015)*

S. Hazarika, T.Wei, R. Mukherjee, A.Barbur *Visualizing the life and anatomy of dark matter SciVis 2015 (Visualization Contest)*

## Honors & Awards

2012 **Graduate School Fellowship**, The Ohio State University

Columbus, OH

2011 **UGC Undergraduate Research Scholarship**, Jadavpur University

Kolkata, India

2010 **WISE Research Scholarship**, German Academic Exchange Service (DAAD)

Berlin, Germany