

# Chirag Bharadwaj

## *Curriculum Vitae*

309 Eddy Street  
Apartment 1D  
Ithaca, NY 14850

(609)-937-6050  
cb625@cornell.edu  
chiragbharadwaj.com

DATE OF BIRTH: November 23, 1996.

FLUSHING, NY, USA

## Education

### Cornell University

B.Sc. candidate in Computer Science, College of Engineering

**Research interests:** Programming Languages and Computer Architecture

GPA: 3.41/4.00

Ithaca, NY  
AUG 2014 – MAY 2017  
(early graduation)

## Research Experience

### Undergraduate Research Assistant

Department of Computer Science, Cornell University

FALL 2016 – PRESENT  
Advisor: Prof. Adrian Sampson

*Designing Hardware-Software Programming Languages for Approximate Computing*

- Project: Generating intermediate representations equivalent in behavior to complex integrated CPU/GPU programs.
- Applications: Creating a GPU-specific ISA that has language support for choosing between approximate and exact calculations as the cruciality of accuracy varies in target user applications.

## Teaching Experience

### Head Undergraduate Teaching Assistant

Department of Computer Science, Cornell University

Course: CS 3110: *Functional Programming and Data Structures*

Tasks: Monitored office hours, co-led review sessions, and helped shape the course in addition to TA responsibilities.

AUG 2016 – PRESENT  
Lecturer: Michael Clarkson

### Undergraduate Teaching Assistant

Department of Computer Science, Cornell University

Course: CS 3410: *Computer Systems*

Tasks: Led weekly labs, created homework problems, and beta-tested exams in addition to consultant responsibilities.

AUG 2015 – MAY 2016  
Lecturer: Anne Bracy

### Course Consultant

Department of Computer Science, Cornell University

Course: CS 2800: *Discrete Structures*

Tasks: Held weekly office hours, graded weekly homeworks, and proctored/graded exams.

DEC 2014 – MAY 2015  
Lecturer: Siddhartha Chaudhuri

## Employment

### Goldman Sachs

Role: Summer Analyst

Tasks: Co-developed administrative consoles for use in cloud platforms that protected against ad-hoc SQL in production;  
Created a RESTful API with a fully-integrated internal authentication system for the console back-end endpoints.

Jersey City, NJ  
JUN 2016 – AUG 2016

### Bank of Tokyo-Mitsubishi UFJ

Role: Technology Operations Intern

Tasks: Used Salesforce technology to integrate legacy systems and provide CRM software in the cloud;  
Created demo scripts and a sandbox environment for participation in SIT/UAT workflow.

New York, NY  
JUN 2015 – AUG 2015

## Honors and Awards

- Outstanding teaching assistant in Computer Science FALL 2015 – SPRING 2016
- Selected for best final project in CS 3110 FALL 2015
- Dean’s List in the College of Engineering FALL 2014, SPRING 2015, FALL 2016
- Outstanding Achievement in Chemistry FALL 2014

## Skills

### Languages:

English (native), Kannada (bilingual), Spanish (professional), Japanese (rudimentary)

### Programming/Scripting Languages:

Java, OCaml, C, Python, bash, CUDA (NVIDIA), Verilog, LLVM, MIPS, ARM

### Software and Tools:

L<sup>A</sup>T<sub>E</sub>X2<sub>ε</sub>, Sublime Text, Eclipse, git, vim, valgrind, gdb, lex/yacc, flex/bison, gcc, clang

## Activities and Interests

### Activities:

Association of Computer Science Undergraduates, Cornell Piano Society, NY State Science Olympiad, Splash! at Cornell, Engineering Peer Advising, Orientation Leadership Committee

### Personal interests:

Applied math, linguistics/formal systems, typography, cartography, teaching and learning, piano, running, badminton

## Personal Projects

- *Implementing Constructive Logics with OCaml*. Siva Somayyajula and Chirag Bharadwaj. Ithaca, NY. December 2016.
  - Final paper and implementation of refinement logics proof assistant available.

## Citizenship

Citizen of the United States.