Chirag Bharadwaj

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EDUCATION

09/2017– **Princeton University**, Princeton, NJ
Master of Science, MSE, Computer Science   GPA: 3.58/4.00

08/2014– **Cornell University**, Ithaca, NY
05/2017   *Bachelor of Science*, BSc, Computer Science
Minor: Electrical and Computer Engineering

INDUSTRY EXPERIENCE

06/2016– **The Goldman Sachs Group, Inc.**, Jersey City, NJ
08/2016   *Summer Analyst*, Technology Infrastructure
- Created and tested back-end of a RESTful API for MySQL queries in the cloud using Dropwizard, Jackson, Jersey, JDBC, Guava/Guice
- Created multithreaded authentication system with pools/streams

06/2015– **The Bank of Tokyo-Mitsubishi, Ltd.**, New York, NY
08/2015   *Technology Intern*, Salesforce Development
- Used Salesforce technology to integrate network's CRM software
- Developed sandbox environment and scripts for QA workflow

RESEARCH EXPERIENCE

12/2017– **Princeton University**, Princeton, NJ   PI: Margaret Martonosi
09/2018   *Summer Research Assistant; Graduate Research Assistant*
- Estimated the performance of architectures in specialized hardware accelerators via (pre-RTL) LLVM compiler analyses

08/2016– **Cornell University**, Ithaca, NY   PI: Adrian Sampson
05/2017   *Undergraduate Research Assistant*
- Created LLVM emitter for CUDA programs to automate real-time acceleration of architectures with tandem CPU/GPU control

PUBLICATIONS

Theses and Dissertations
1. **C Bharadwaj**. *TBD*. Princeton University, in progress.
2. **C Bharadwaj**. *LambdaLab: Interactive λ-calculus for Learning*. Cornell University.

Non-archival Proceedings
1. **C Bharadwaj**, TJ Ham, O Matthews, JL Aragon, MR Martonosi. *Pythia: Measuring the Acceleratability of Specialized Accelerators*. To appear in SRC TECHCON, 09-2018.
2. **C Bharadwaj**, SD Gore. *Reddit Comments via Generative Grammar Modelling*. Cornell University archives, 05-2017.
3. SK Somayyajula, **C Bharadwaj**. *Refinery: Implementing Constructive Logics in OCaml*. Cornell University archives, 12-2016.

Citizenship
United States of America

Spoken Languages
English, Spanish, Mandarin

TECHNICAL SKILLS

Programming and Scripting
Java, Kotlin, C, C++, OCaml
Python, Ruby, BASH, awk, sed

Verification and Solvers
Coq, NuPRL, SystemVerilog

Web Development
HTML5, CSS/SASS, JavaScript
Dropwizard, JDBC, SQL, Guice
Jekyll, Ruhoh, Nanoc

Hardware, Assembly, ISAs
CUDA, LLVM, ARM, MIPS, RISCV
Verilog, Quartus, ModelSim
GTKWave, SPICE, Cadence

Tools and Libraries
LaTeX, Markdown
Eclipse, IntelliJ, CLion, vim
CMake, Makefile, Ninja, Gradle
Git, Subversion, Mercurial
GDB, valgrind, gprof
Lex, YACC, Flex, Bison

ACADEMIC TEACHING (TA)

Digital Logic Design	(1 sem.)
Computer Organization	(4 sems.)
Functional Programming	(2 sems.)
Discrete Mathematics	(1 sem.)

ACTIVITIES

Princeton University
Political Engagement Initiative
Asian-American Student Assn.
Graduate Engineering Council
Splash! at Princeton
NJ State Science Olympiad

Cornell University
Women and URMs in Computing
Association of CS Undergraduates
Freshman Orientation Leadership
Engineering Peer Advising
Splash! at Cornell
NY State Science Olympiad
Cornell Piano Society