### **CHONG SHAO**

E-MAIL

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#### PRESENT ADDRESS

425 Hillsborough ST, APT 6C Chapel Hill, NC 27514 (919) 619-0326

### **EDUCATION**

University of North Carolina at Chapel Hill, Chapel Hill, NC Doctor of Philosophy, Computer Science, 2012-2017 (expected)

Advisor: Professor Stephen Pizer

Polytechnic Institute of New York University, Brooklyn, NY Bachelor of Science, Electrical Engineering and Computer Engineering, 2010-2012 G.P.A. 3.86/4.0

Courant Institute of New York University, New York, NY Graduate Level Course on Computer Vision, 2011 G.P.A. 3.70/4.0

Nanjing University of Posts and Telecommunications Electrical and Computer Engineering, 2007-2009 G.P.A. 3.59/4.0

#### **EXPERIENCE**

Research Assistant Computer Science Department Since August 2012

University of North Carolina at Chapel Hill

Chapel Hill, NC

Conduct research on statistics of objects in context using medial/skeletal models. Result is applied in radiology.

Tutoring Center Spring 2010 - Spring 2012

Polytechnic Institute of NYU

Brooklyn, NY

Helped students solve problems in computer science courses; made mock exams for review purpose. Worked on C++, Matlab and Python programming problems.

Research Assistant Information Systems and Internet Security Lab, Summer 2011

Polytechnic Institute of NYU

Brooklyn, NY

Worked on problems in image forensics, especially on the problem of fast source camera model identification. Applied Locality-Sensitive Hashing (LSH) method to the problem, analyzed the algorithm, implemented the algorithm and analyzed the experiment result. Wrote formal reports. Gave presentations to colleagues.

Internship Suzhou Software Testing Center Summer 2008

Suzhou, China

Worked with experienced engineers on several enterprise software testing tasks.

Handheld 3D Scanner Computational Photography, NYU Courant

Fall 2011

Implemented "structure from motion" in two ways: Bundler and factorization method. Wrote code to implement factorization method. Applied two matlab toolboxes in camera calibration.

Parallel Sorting

Intro to Embedded System, NYU-Poly

Fall 2011

Implemented parallel sorting on two Silicon Labs microcontrollers, which involved writing code for communication and sort algorithm.

Arithmetic Logic Unit

Intro to VLSI, NYU-Poly

Spring 2011

Designed the circuit and layout of an ALU. It contained function ADD, SUB, MUL, LSHIFT, RSHIFT, AND, OR and AND.

Quantum Compilers

Physics of Quantum Computers, NYU-Poly

Spring 2011

Did a survey on the proceedings of quantum compilers. Studied Dr. Svore's Ph.D. Thesis and Prof. Aho's research. Gave presentations to classmates and professor.

Naïve Bayes OCR

SICP, UC-Berkeley

Summer 2010

Implemented an optical character recognition system based on a naive Bayes classifier model in University of California, Berkeley summer session class.

### Other recent projects can be found on my GitHub page

### APPLICATIVE SKILLS

Proficient programming in Matlab, Java, Python, Ruby

Familiar with C++, Scheme, Haskell, HTML/CSS, JavaScript

Experience in developing MVC web applications in Python and Java

Familiar with Linux Administration and Programming

Familiar with CMake

Proficient document formatting using LATEX

Fluent in English and Chinese

### SELECTED COURSES

### at University of North Carolina at Chapel Hill:

Medical Image Analysis, Object-Oriented Data Analysis, Scientific Computing

# at New York University:

Computer Vision, Computational Photography, Optimization Methods

#### from Resources on the Web:

Machine Learning, Convex Optimization, Natural Language Processing

## EXTRACURRICULAR ACTIVITIES

Contestant in ACM-ICPC Greater NY: 2011 Developer of one iPhone app on Apple app store in 2010

## **CERTIFICATIONS**

Sun Certified Java Programmer (SCJP), obtained in 2008