

# Harry (Chenguang) Liu

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## OBJECTIVE

Seeking a Software Engineer Summer Intern position with strong object-oriented software engineering skills, abilities and experiences to contribute to the ongoing success of company.

## EDUCATION

**University of California San Diego** La Jolla, CA

Sep 2016 - Present

Master of Science, Computer Science GPA: 3.67

Relevant Courses: Probabilistic Reason & Learning, Algorithm Design and Analysis, Principles of DataBase Systems, Principles of Computer Operating Systems, Advanced Compiler Design, Recommender Systems & Web Mining.

**Fudan University** Shanghai, China

Sep 2012 - Jul 2016

Bachelor of Science, Microelectronics GPA: 3.50

Relevant Courses: Program Design, Object-Oriented Programming, Fundamentals of Computer Software (Data Structures & Software Engineering), Computer Architecture, Principles of Microcomputer and Interface.

## PROFESSIONAL SKILLS

**Advanced Programming Languages**

C++, C, Python.

**Other Programming Languages**

Java, perl, SQL.

**Applications**

Visual Studio, Xcode, Eclipse, Subversion, VIM, GDB, Qt.

**Operating Systems**

Unix, Linux, Mac OSX, Windows.

## INTERNSHIP EXPERIENCE

**Software Development Engineer Intern**

Jul 2015 - Aug 2016

*Fudan Microelectronics Group Co., Ltd, Shanghai China*

- Developed and tested a C++ software application for Electronics Design Automation System to analyze bit stream generation and configuration on both Linux and Windows platform.
- Designed, developed and tested a C++ software application to configure and setup FPGA using JTAG protocol on a team of 3 and improved application runtime performance by optimizing data packaging and data transmission algorithms, performing better than Xilinx's iMPACT software finally.
- Designed, developed and tested a C++ software application to generate and modify bit stream to configure FPGA on a team of 4. Responsible for some software test jobs, including bit stream generation error checking and automation unit/functional test for the FPGA EDA design flow by script in perl and tcl language.

## PROJECT EXPERIENCE

**Recommender Systems (Python/sklearn)**

Winter 2017

*Recommender Systems & Web Mining*

- Builded a recommender system to make Amazon and Yelp rating predictions based on sentiment analysis and text mining in Python. Developed different models using linear regression, SVM regression and latent factor model with sklearn package. Finally got 3rd rank over 300 people in a competition on Kaggle.

**Dataflow Analysis Framework (C++/LLVM)**

Winter 2017

*Advanced Compiler Design*

- Designed and Developed a dataflow analysis framework for IR assembly language program analyses and optimizations in compiling using LLVM framework in C++.

**Operating System Design (C)**

Winter 2017

*Principles of Computer Operating Systems*

- Designed and implemented some basic concepts such as processes and threads scheduling, synchroization of an operating system in C.

**Artificial Intelligence Gomoku Game (C++/Qt)**

Fall 2014

*Object-Oriented Programming*

- Designed and Developed a C++ Gomoku (five-in-a-row) game using AI programming in Qt framework on Mac OS.