Yunshan (Richard) Yan

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This file was compiled at Fri 1st Feb, 2019 at 11:19pm EST. Most up-to-date version can be accessed at:

https://github.com/RichardYan314/Resume/blob/master/resume.pdf

A '.docx' formatted version generated from this file can be accessed at: https://github.com/RichardYan314/Resume/blob/master/resume.docx which may not be up to date.

My unofficial transcript for both MASc and BASc degrees can be accessed at: $\label{lower} $$ $$ $$ https://github.com/RichardYan314/Resume/blob/master/transcript_unofficial.pdf$

EDUCATION

Queen's University, Canada

Master of Engineering, Department of Electrical and Computer Engineering Expected May 2018

Queen's University, Canada

Bachelor of Applied Science, Department of Electrical and Computer Engineering GPA: CGPA: 3.85/4.2

TECHNICAL SKILLS

Programming Languages: Python, Java ,JavaScript, C, C++, Haskell, Coq,

Scheme, TXL

Database: MySQL

General: Embedded Systems, Data Mining, Algorithms.

EXPERIENCE

Queen's University: Research Assistance

Sept. 18 - Dec. 18

Research Assistance in Software Reengineering Research Group.

url: http://post.queensu.ca/ zouy/ (The server does not have HTTPS capability)

Queen's University: Graduate Teaching Assistance Sept. 18 - Dec. 18 Graduate TA for course ELEC 278: Data Structures. Duties involved supervising lab activities, proctoring quizzes, marking final exams, and answer student questions.

Queen's University: Undergraduate Teaching Assistance Jan. 18 - Apr. 18

Undergraduate TA for course ELEC 274: Computer Architecture. Duties involved supervising lab activities and answer student questions.

Queen's University : Undergraduate Teaching Assistance Sept. 17 - Dec. 17

Undergraduate TA for course ELEC 278: Data Structures. Duties involved supervising lab activities and answer student questions.

Queen's University: Undergraduate Teaching Assistance Jan. 17 - Apr. 17

Undergraduate TA for course ELEC 274: Computer Architecture. Duties involved supervising lab activities and answer student questions.

Queen's University : Undergraduate Teaching Assistance Sept. 16 - Dec. 16

Undergraduate TA for course ELEC 221: Electric Circuits. Duties involved supervising lab activities, preparing assignment solutions, and answer student questions.

PROJECTS

Networking Support for Terasic DE10 Board

Sept. 2017 - Apr. 2018

Networking capability was added to the Terasic DE10 board, a embedded system build around the Intel System-on-Chip(SoC) FPGA, by interfacing it to a WIZ812MJ, a commercially available network module, through both SPI and parallel bus communication interface. This project is awarded as the Students' Choice: The Best Engineering Capstone Project.

• Technology/Tools: FPGA, C, Nios II assembly, Altera Quartus II, TCP/IP stack.

FPGA Implementation of the MiniSRC processor

Jan. - Apr. 2017

The RISC style MiniSRC processor was implemented on Altera FPGA using VHDL language. In addition, an assembler was built to convert MiniSRC assembly language to Altera FPGA Memory Initialization File (.mif).

• Technology/Tools: VHDL, FPGA, Altera Quartus II.

Compiler for Programming Language Garnet

Sep - Dec 2016

A compiler was developed for the programming language Garnet: a Ruby/Pascal like language. All four phases of the compiler (i.e., lexing, parsing, semantic analyzing, and code generating) are implemented in the S/SL language (Syntax/Semantic Language) (Holt, Richard C., James R. Cordy, and David B. Wortman. "An introduction to S/SL: Syntax/semantic language." ACM Transactions on Programming Languages and Systems (TOPLAS) 4.2 (1982): 149-178.)

• **Technology/Tools:** S/SL, Linux Intel x86 assembly, Theories of Formal Languages and Automata.

CERTIFICATION.

• Machine Learning by University of Stanford on Coursera

Verify: https://www.coursera.org/account/accomplishments/certificate/QCX VU9KDVW59

RELEVANT COURSES

- Digital Systems Data Structures Computer Architecture
- Mechatronics Project Fundamentals of Software Development
- Algorithms Probability & Random Processes
- \bullet Microprocessor Systems \bullet Operating Systems \bullet Software Specifications
- Database Management Systems Computer Graphics
- Programming Language Processor Digital Systems Engineering
- Computer System Architecture Computability & Complexity
- Formal Methods In Software Engineering Image Processing & Computer Vision
- Number Theory & Cryptography Computer Networks
- Control Of Discrete-Event Systems Computational Complexity
- Mining Software Engineering Data Software Reengineering
- Design recovery and Automated Evolution Semantics of Programming Languages

Awards

- Queen's University Excellence Scholarship, 2014
- Dean's Scholar, 2015, 2016, 2017, 2018
- Ho Ming Tai Memorial Scholarship, 2015, 2016, 2017, 2018
- Teaching Assistant of the Year, 2017

 \bullet Students' Choice: The Best Engineering Capstone Project, 2018