

ZHIYUAN LIN, ZANE

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EDUCATION

University of Waterloo, Waterloo, Canada 09/2014 - 08/2016

Master of Applied Science in Electrical and Computer Engineering

Courses: Algorithm Design and Analysis, Compiler Construction, Public-Key Cryptography

GPA: 97.60/100

Awards: Faculty of Engineering Award

University of Glasgow, Glasgow, UK 09/2012 - 12/2013

Master of Science in Information Technology *with Distinction*

GPA: 20.053/22

Renmin University of China, Beijing, China 09/2008 - 07/2012

Bachelor of Economics

WORK EXPERIENCE

MosiaxSoft, Inc. 04/2015 - 08/2015

Software Engineering Internship (Cloud Computing) Los Altos, USA

- Developed in Java a cloud security management system that provides a high-level interface for monitoring and configuring the security of cloud platforms such as OpenStack.
- Researched the complexity of various cloud management problems and designed solutions accordingly.

China Life Insurance Company 02/2014 - 07/2014

Software Engineering Internship (Web Development) Guangzhou, China

- Implemented a human resource management system that facilitates the management of more than 5000 employees using ASP.NET (C#) web services and Microsoft SQL Server.
- Created an AJAX-based interactive web front-end for the system in jQuery.

PROJECTS

Joos 1W Compiler 01/2016 - 04/2016

Lead Developer

- Developed a compiler from the Joos 1W language, a large subset of Java, to NASM assembly.
- Implemented important compiler features such as type checking, static analysis, and code generation.

Resource Description Framework (RDF) Security 09/2015 - 08/2016

Sole Developer

- Designed and implemented an algorithm that secures RDF graphs using satisfiability (SAT) solvers.
- Empirically evaluated the implementation and visualized the data with Matplotlib.

Matching Algorithms Toolkit 04/2013 - 08/2013

Contributor

- Implemented and optimized several matching algorithms that solve the House Allocation problem.
- Created a graphical user interface with Java Swing to facilitate the usage of the algorithms.

SKILLS

Programming Languages (in order of proficiency): Java, Python, C, C#, SQL, JavaScript, Haskell

Frameworks and Libraries: SageMath, Scipy, Flask, ASP.NET, jQuery

Theory: Algorithm Design and Analysis, Statistical Analysis, Compiler Design, Cryptography

Languages: English (Fluent), French (Beginner), Cantonese and Mandarin (Native)