ZHIYUAN (ZANE) LIN

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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

MosaixSoft, Inc. 04/2015 - 08/2015
Software Engineering Internship (Cloud Computing) *Los Altos, USA*

· Developed 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 with real-world input and visualized the data with Matplotlib.

Matching Algorithms Toolkit 04/2013 - 08/2013
Contributor

· Implemented and optimized several matching algorithms to solve the House Allocation problem.
· Created graphical user interfaces with Java Swing to facilitate the usage of the algorithms.

SKILLS

Programming Languages (in order of proficiency): Java, Python, 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)