

Nian Liu

UNIVERSITY OF WATERLOO
4A Computer Science (2014 – present)

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TECHNICAL SKILLS

LANGUAGES

•C# •C/C++ •Scala •JavaScript •CQL(Cassandra) •SQL •Java •Python •Bash

LIBRARIES AND APIS

•Angular 1 •Apache Spark •ASP.NET •Entity Framework •JQuery •MVC Framework •Newtonsoft.JSON •NUnit •Selenium
•Swagger •Typemock •XNA Game Studio

APPLICATIONS

•DataStax DevCenter •IIS •Jira •Perforce •Postman •SQL Server •Subversion •TFS •Visual Studio

WORK EXPERIENCE

BLOOMBERG LP | Software Engineering Intern

January 2018 - April 2018 | New York, NY, U.S.A

- Worked on Multi-Asset Risk System(MARS), a Terminal function for risk management for portfolio
- Used Apache Spark to improve data aggregation process which reduced server pressure and client-side calculation
- Tuned Cassandra database that improved Spark read and write performance

NVIDIA | Grid Cloud Software Engineer

May 2017 - August 2017 | Santa Clara, CA, U.S.A

- Worked on NVIDIA Entitlement System, a web service that manages user information for NVIDIA GeForceNow
- Created and maintained RESTful API endpoints and web portal UI
- Implemented and maintained an authentication service using the OAuth standard for the whole solution ecosystem
- Utilizing Cassandra database for fast access to reduce service latency
- Created unit and integration tests for existing and new features

BDO IT SOLUTIONS | Junior Consultant and .NET Developer

September 2016 - December 2016 | Mississauga, ON, Canada

- Worked on MMS, a cloud-based multi-tenancy web application
- Utilized Microsoft technology stack; including MVC Framework, Entity Framework and MS SQL
- Implemented, stabilized and refactored several features to improve performance
- Deployed and maintained QA testing site
- Assisted off-shore development team with technical problems and client requirement explanations

TRAPEZE GROUP | Software Developer/Analyst

January 2016 - April 2016 | Mississauga, ON, Canada

- Worked on Novus platform, an enterprise-level web software system for public transit
- Improved and extended test framework for Novus using Selenium and NUnit with C#
- Implemented functionality including database management, data-driven-test generation and failure-log into the test framework
- Discovered and resolved several bugs and defects in product-level applications
- Modified and converted applications UI to fit newer version of platform

2TOLEAD | Office 365 Developer

May 2015 - August 2015 | Remote, Canada

- Worked on proof of concepts of utilizing Microsoft Graph in SharePoint
- Investigated the capability of Microsoft Graph service
- Created SharePoint JavaScript web parts with Microsoft Graph

PROJECTS

CHAMBER CRAWLER 3000 | A ROGUE-LIKE TERMINAL GAME IN C++

December 2015 | University of Waterloo

- A terminal rogue-like game project fully implemented in C++, that offers multiple player characters and abilities
- Applied MVC, Decorator and Visitor design patterns
- Created an UML that explains the relationship between classes and inheritance tree to team

POKEMON BATTLE | A POKEMON THEMED 2-PLAYER GAME IN C#

December 2013

- Utilized XNA Game Studio 4.0 Framework
- Implemented sprite action animations, game music and sound effects
- Offered two input options including keyboard and Xbox controller