Zonghan Xu

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LINKS

Github:// 59412
LinkedIn:// ZonghanXu

EDUCATION

UNIVERSITY OF WATERLOO
Honours Combinatorics and Optimization
Honours Computational Mathematics
Honours Computer Science
Academic Level: 3B

SPECIALIZATION

Algorithm Design
Computer Forensics
Computer Network
Graph Theory
Machine Learning

SKILLS

PROGRAMMING
C • C++ • C# • Scheme
VBA • Java • Python • Bash

FORENSICS
McAfee ePolicy Orchestrator
Qualys Vulnerability Management

DATABASE
MongoDB • MySQL

VISUAL DESIGN
AutoCAD• Adobe Illustrator
Adobe Photoshop • LaTeX

VERSION CONTROL
Git

OTHERS
Excel • InfoPath • PowerPoint
R • MATLAB

WORKING EXPERIENCE

BANK OF MONTREAL | SECURITY ANALYST
Jan 2017 - Apr 2017 | Scarborough, ON
- Assisted in a variety of teams within the Global Information and Technology Risk Management Department.
- For multiple operating systems and database systems, a conversion table that maps the controls from the enterprise version of hardening standards to equivalent CIS Benchmark standards(similar to ISO27000) is created respectively.
- Created several C# scripts for reorganizing Excel documents and retrieving information from them.
- Studied network security areas including TCP/IP protocol and cryptography.

SELECTED PROJECTS

VIRTUAL BIOCHEMISTRY SIMULATOR | BIOINFORMATICS PROJECT
Apr 2017 – Present | University of Waterloo & University of Toronto
- A bioinformatics project created by a multidisciplinary group of University students from both University of Waterloo and University of Toronto.
- The main goal of the project is to create a computational simulation of metabolic network.
- Currently the C++ program is able to use the amount of ATP generated by a certain reaction to calculate how many ATP will be required in total.
- Constructed the calculation algorithms for biological formulas
- Conversed several recursive calculations into linear calculations by using combinatorial enumeration which significantly boosted the efficiency of the program

ROOMA | C PROJECT
Jan 2016 - Present| University of Waterloo
- A project written in C that gives the user information about any courses in University of Waterloo.
- User is able to search by various categories, such as catalogs, time slots, professors and room numbers etc.
- The project uses API provided by University of Waterloo.
- The App version of the project is currently under progress.

MONOPOLY | C++ GAME
Jul 2016 – Aug 2016| University of Waterloo
- Monopoly Game created as the final project for CS246, Object-Oriented Software Development
- The game is written in C++ and Git was used for version control
- The project was done in a group of 3 and passed more than 90% of all tests.