# JING QI

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BFS for learning, DFS for researching. Seeking for a full-time position in software development.

#### **EDUCATION**

## Syracuse University, College of

Engineering & Computer Science, Syracuse, NY

*MS., Computer Engineering,* Expected May 2019

GPA: 3.82/4.00

#### China University of Geosciences,

College of Information & Engineering, Beijing

*B.E., Electronic and Information* Engineering, June 2017

# **SKILLS AND INTERESTS**

# Languages:

Python, C++, C;

*Competence:* C#, JavaScript, HTML, SQL, Golang, Java, Markdown.

#### **Tech Stacks:**

ASP.NET Core, Linux programming, HTML+CSS+JS Frontend Framework, Windows Presentation Foundation, Network (Socket) Programming, Microchip Programming

#### Competence:

Amazon Web Service, Django (a blog website: 18.216.116.220), Scrapy, QT, Android Programming, Algorithms in Artificial Intelligence

#### **Operating System:**

Ubuntu, Windows, MacOS

#### Software:

Visual Studio, VS Code, PuTTY, WinSCP, Virtual Box, Git, PyCharm, Vim, Android Studio, Wireshark, Docker

#### COURSEWORK

Software Modeling and Analysis
Object Oriented Design
Computer Security
Internet Security
Internet Programming
Introduction to Cryptography
Introduction to Artificial Intelligence
Advanced Computer Architecture

#### **AWARDS**

**Graduate Student Grant**, Syracuse, NY 30% Tuition Scholarship, Sep. 2017 – May. 2019 (Expected)

**Academic Scholarship,** Beijing, China Top 2% students, Sep. 2016 – May. 2017

# INDEPENDENT PROJECTS

#### Homemade Docker Engine using Golang: (click the name for details)

- Used Git to track the development process
- Namespace, Cgroups, AUFS to create containers
- · Built network system with Linux network virtualization technology
- Deployed a Nginx web server on my docker

#### **VPN from Scratch with C:**

- Programed with TUN/TAP to create virtual network interface
- Used SSL based on PKI to encrypt tunnel
- Built a C/S communication mechanism by socket programming

# Code Repository Client/Server System with C++:

- Designed check in/out, version, browser modules in OOD
- Developed a NoSQL in-memory database with C++
- Designed the GUI with C#, the .NET WPF, and C++/CLI
- Designed a C++ communication system based on sockets

# **Build Server System with C#:**

- Designed the system and wrote a concept document
- Used MSBuild to compile C# code for testing
- Designed a process pool to handle concurrency
- · Implemented test server for unit testing

# **Wox Plugin Development – Recall:**

- Designed a plugin followed by Wox API document
- Uploaded to the public Wox plugin store and got 1k+ download

#### **Automatic Number Plate Recognition (NPR) System:**

- Built STM32 microchip firmware for data capturing, transmission
- Wrote an NPR algorithm using SVM and ANN with OpenCV library
- Developed GUI and serial-port communication Program with QT

#### Web-based eBook Reader:

- Designed website with Asp.Net MVC framework
- Used web pages with JS+HTML+CSS
- Dealt with OneDrive APIs for file viewing and downloading

#### Image Recognizer Based on Deep Learning:

- Developed a neural network model from scratch with Python
- Vectorized logistic regression's gradient output by Numpy

#### **PUBLICATION**

Deng CJ, **Qi J**, Li M. Application Progress of Signal Clustering Algorithm, Communications in Computer and Information Science, July 2016

#### **EXPERIENCE**

## Syracuse University, Syracuse, NY

Teaching Assistant for Internet Security, Jan. 2019 – May. 2019 (Expected)

- Held office hours every day and graded students' lab reports
- Participated in writing "Instructor Manual" for SEED Labs

# **China Resources Microelectronics Limited,** Wuxi, Jiangsu, China *Intern of IT Department,* Jul. 2015 – Aug. 2015

- Developed a work flow management software named TOBE in C# with WPF
- Wrote document for TOBE