# Ziqi (Alan) Dong

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## **EDUCATION**

## Carnegie Mellon University, School of Computer Science

Pittsburgh, PA

Master of Software Engineering - Scalable Systems

Dec. 2020

Selected Coursework: Introduction to Computer Systems, Models of Software Systems, Managing Software Development.

## **Northeastern University**

Shenyang, China

Bachelor of Engineering in Software Engineering

Jun. 2019

Selected Coursework: Operating System, Introduction to Distributed System, Introduction to Artificial Intelligence.

## Nanyang Technological University

Singapore

Short-term Visit Program in Innovation and Entrepreneurship

Feb. 2018

#### SKILLS

**Programming Languages**: Java, C, C++ (Advanced), Python, HTML, JavaScript, SQL (Intermediate), CSS (Novice). **Software & Framework**: IntelliJ IDEA, CLion, Qt, Eclipse (Advanced), PyCharm, Matlab, TensorFlow, Keras (Intermediate), OpenCV (Novice).

## **EXPERIENCE**

Virginia Tech Research Intern Blacksburg, VA

Sep. - Nov. 2018, Mar. - Jun. 2019

- Designed and implemented a similar code detecting tool which includes a CNN model to rate the similarity of pairs of code snippets. Achieved an accuracy of 98% in the J2EE test dataset and 96% in the BigCloneBench test dataset.
- Mined open source repositories for migration-related (MR) commits and constructed a database which was used in Meditor, a tool learns API migration pattern, achieved 95%+ accuracy.
- Evaluated the effectiveness of manual, monkey and stochastic model-based (Stoat) testing, which indicated that Stoat testing performs the best in terms of lifecycle events and is able to mimic human behaviors for certain apps.

NEUSoft Inc. Shenyang, China

Software Engineering Internship

Jun. - Sep. 2018

- Developed the beta-version of an end-to-end smart logistics system by Qt framework that takes operational commands from mobile applications and communicates with the core database for further business operations.
- Implemented a highway toll system using Qt, OpenCV and Caffe model which is capable of recognizing vehicle plates at the highway entrance to achieve automatic payment. Achieved 97% accuracy in Neusoft Enterprise Database.

## **Northeastern University**

Shenyang, China

Research Assistant

Mar. - Jun. 2017

- Carried out a neural network model to predict human pre-miRNA by TensorFlow, which achieved 90%+ accuracy.
- Conducted data retrieval and pre-processing 1216 raw pre-miRNA sequence.

## **PUBLICATIONS**

- Shengzhe Xu, **Ziqi Dong**, Na Meng, Meditor: Semantics-Based Generation and Application of API Migration Edits, 2019 ACM International Collegiate Programming Contest (ICPC 2019).
- Chaohe Zhang, Dancheng Li, Hongfa Wu, Chunyan Han, Ziqi Dong, Hailong Li, Chen Ding, A Prediction Method of MicroRNA Based on TensorFlow Framework, 2017 CHINESE NATIONAL CONFERENCE on COMPUTERS APPLICATION (NCCA 2017).

### **HONORS**

Meritorious Winner, Mathematical Contest in Modeling, COMAP

2018

Academic Outstanding Individual, Northeastern University

2018

Second-class Scholarship, Northeastern University

2017, 2018

Second Prize, Contemporary Undergraduate Mathematical Contest in Modeling, CSIAM

2017