

# Ziqi (Alan) Dong

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## EDUCATION

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**Carnegie Mellon University**, School of Computer Science

Pittsburgh, PA

*Master of Software Engineering - Scalable Systems*

Dec. 2020

*Selected Coursework:* Introduction to Computer Systems (A), Models of Software Systems, Managing Software Development, Methods: Deciding What to Design, Coding Boot Camp.

**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

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**Programming Languages:** Java, C, C++ (Advanced), Python, HTML, JavaScript, SQL, CSS (Intermediate).

**Software & Framework:** Qt, TensorFlow, Keras (Advanced), OpenCV, Matlab, (Intermediate).

## EXPERIENCE

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**Virginia Tech**

Blacksburg,

VA

*Research Intern*

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

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- 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

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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