# Shuze Liu

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#### **EDUCATION**

Yale University May 2020

M.S., Computer Science Cumulative GPA: ongoing

Rensselaer Polytechnic Institute May 2019

B.S., Computer Science Cumulative GPA: **4.0/4.0** (Summa Cum Laude)

## INTERNSHIP EXPERIENCE

Alibaba Group

June 2019 -- Aug. 2019

## Algorithm Engineer Intern

Hangzhou, China

- Developed a program in **Python** to test actual performance of twelve convolutional neural networks on the server.
- Implemented ShuffleNet v2 by MxNet in **Python**. Trained the convolutional neural network on clothing pictures.
- Achieved 91.8% accuracy on clothing classification problem and decreased training time by tuning the hyperparameters.
- Developed an API for this CNN to allow the City Brain project to feed any size of pictures and get their labels.

## **PUBLICATIONS**

• Shuze Liu, Farhad Mohsin, Oshani Seneviratne, Lirong Xia. Strengthening Smart Contracts to Handle Unexpected Situations. Published on IEEE International Conference on Decentralized Applications and Infrastructures

## SELECTED PROJECTS

#### **Strengthening Blockchain Code to Handle Unexpected Situations**

May 2018 -- May 2019

#### Undergraduate Researcher

Troy, New York

- Developed a course selection system on the blockchain platform, Hyperledger Composer in **Javascript**.
- Designed a voting mechanism with an "action list" to handle unexpected situations in blockchain code.
- Augmented this mechanism with generic principles. Created generic APIs for incoming blockchain code.
- Implemented a pre-processer in C++ to parse incoming blockchain code and automatically decorate the chaincode with the above design.

**GoSki iOS app** Jan. 2019 -- May 2019

- Developed an iOS app to gather information of ski mountains and provide tutorials for skiers.
- Managed team to follow **Agile software development principles**. Wrote corresponding documentation for each sprint or release.
- Implemented an account system and stored users' data in Firebase.
- Implemented a feature to locate friends using GoogleMap API.

#### SKILLS

- Programming Languages: Proficient in Python, C, C++, Java, Javascript. Familiar with Prolog, Scheme.
- Frameworks: TensorFlow, MxNet, Pytorch.

## **TEACHING & COURSES**

- Undergraduate **Teaching Assistant**: Intro. to Algorithms (Spring 2019), Intro. to Logic (Fall 2018)
- **Programming Intensive Courses:** Software Engineering, Software Development & Documentation, Operating Systems, Principle of Software, Programming Languages, Principle of Compliers, Intro. to Database Systems.
- AI & Theory Courses: Deep Learning, Intro. to Artificial Intelligence, Graph Theory, Machine Learning in Blockchain, Computability and Logic, Advanced Computer Algorithms,