

# Shuze Liu

+1-(518)360-5086 | shuzeliu@virginia.edu | [Google Scholar](#)

## Education

---

<b>University of Virginia</b> Ph.D. Computer Science    GPA: 4.0/4.0 Advisor: Prof. Shangtong Zhang	<i>May 2026</i>
<b>Yale University</b> M.S., Computer Science    GPA: 3.88/4.0	<i>May 2020</i>
<b>Rensselaer Polytechnic Institute</b> B.S., Computer Science    GPA: 4.0/4.0	<i>May 2019</i>

## Publication

---

- [Improving Monte Carlo Evaluation with Offline Data](#)  
Shuze Liu, Shangtong Zhang.  
International Conference on Machine Learning (**ICML**), 2024.
- [The ODE Method for Stochastic Approximation and Reinforcement Learning with Markovian Noise](#)  
Shuze Liu, Shuhang Chen, Shangtong Zhang.  
Under review of Journal of Machine Learning Research (**JMLR**), 2024.
- [Optimal Pricing of Information](#)  
Shuze Liu, Weiran Shen, Haifeng Xu.  
ACM Conference on Economics and Computation (**EC**), 2021.
- [Strengthening Smart Contracts to Handle Unexpected Situations](#)  
Shuze Liu, Farhad Mohsin, Oshani Seneviratne, Lirong Xia.  
IEEE International Conference on Decentralized Applications and Infrastructures, 2019.

## Industry Experience

---

<b>Alibaba Group</b> <i>Machine Learning Engineer</i>	<i>June 2019 – Aug. 2019</i> <i>Hangzhou, China</i>
• Developed twelve convolutional neural networks and back-end APIs on image classification problems.	

## Academia Experience

---

<b>University of Virginia</b> <i>Research Assistant</i>	<i>Aug. 2020 – Ongoing</i> <i>Charlottesville, Virginia</i>
• Designed an efficient behavior policy for policy evaluation, saving up to 65% samples.	
• Trained RL agents across servers distributively with 1000+ copies.	
• Proved the stability of stochastic approximation and RL algorithms.	
• Designed the optimal information pricing algorithm.	
<b>Rensselaer Polytechnic Institute</b> <i>Undergraduate Research (Project funded by IBM)</i>	<i>May 2018 – May 2019</i> <i>Troy, New York</i>
• Developed a decentralized course selection system on the blockchain platform in JavaScript. Implemented a preprocessor in C++ to parse blockchain codes and decorate them with new features.	

## Skills

---

- Programming Languages: Python, C/C++, JavaScript, SQL, Pascal.
- Tools: Pytorch, Tensorflow, Shell Scripting, Git, Docker, Slurm, Weights & Biases.

## Teaching

---

Teaching Assistant: Artificial Intelligence, Algorithmic Economics, Intro. to Algorithms, Intro. to Logic.  
Guest Lecture: Mechanism Design (Fall 2021), Reinforcement Learning (Spring 2024).