SHENAO ZHANG

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EDUCATION

Georgia Institute of Technology *May 2020 - Dec. 2021 (expected)*
M.S. in ECE (Electrical and Computer Engineering), GPA: 3.87/4.00 *Atlanta, GA*

Georgia Institute of Technology *Jan. 2021 - Aug. 2022 (expected)*
M.S. in CSE (Computational Science and Engineering), GPA: 4.00/4.00 *Atlanta, GA*

South China University of Technology *Aug. 2016 - May 2020*
B.Eng. in EE (Information Engineering Innovation Class) *Guangzhou, China*

University of California, Berkeley *Jan. 2019 - May 2019*
Visiting student at Department of EECS, GPA: 3.90/4.00 *Berkeley, CA*

RESEARCH INTERESTS

My research interests lie in reinforcement learning and robotics. I am interested in developing RL algorithms that are theoretically efficient with application to robotic systems.

PUBLICATIONS

[1] **Shenao Zhang**, Evangelos Theodorou. Dual Conservative Policy Update for Efficient Model-Based Reinforcement Learning. Under review at *International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2022. Full paper.

[2] **Shenao Zhang**, Li Shen, Lei Han, Li Shen. Learning Meta Representation for Agents in Multi-Agent Reinforcement Learning. Under review at *Machine Learning Journal*. Arxiv paper.

[3] **Shenao Zhang**, Li Shen, Zhifeng Li, Wei Liu. Structure-Regularized Attention for Deformable Object Representation. Accepted at *Advances in Neural Information Processing Systems (NeurIPS) Workshop*, 2020. Paper website and full paper.

RESEARCH EXPERIENCE

Georgia Tech *May 2021 - Present*
Research Assistant. Advisor: Evangelos Theodorou *Atlanta, GA*
Stochastic analysis of reinforcement learning complexity bound.

Tencent AI Lab *Aug. 2019 - Aug. 2020*
Research Intern. Advisors: Li Shen, Lei Han and Li Shen *Shenzhen, China*
Computer vision and multi-agent reinforcement learning.

Columbia University *May 2019 - Aug. 2019*
Research Assistant. Advisor: Bo Wu *New York, NY*
Computer vision.

South China University of Technology *Sep. 2017 - Jan. 2019*
Research Assistant. Advisors: Huabiao Qin and Mingkui Tan *Guangzhou, China*
Robotics and reinforcement learning.

TEACHING EXPERIENCE

Graduate Teaching Assistant: Head TA of CS 7648: Interactive Robot Learning (Fall 2021) at Georgia Tech.

SELECTED PROJECTS

Object Detection *May 2019 - Oct. 2019*
Project paper, advised by Bo Wu *Columbia University*

Computer Graphics *Jan. 2019 - May 2019*
Advisors: Ren Ng and Jonathan Ragan-Kelley *UC Berkeley*

- Final project: Cloth Simulation using OpenGL Shader, project website
- Projects of Rasterizer, MeshEdit, PathTracer, Physical Simulation, code and reports can be found here

Gaze Tracking in Natural Light *Oct. 2017 - Oct. 2018*
Project paper, accepted at *International Conference on Control and Automation (ICCA)*, 2019

RELEVANT COURSES

Undergraduate courses: Computer Graphics (CS 184 at UC Berkeley), Intro to AI (CS 188 at UC Berkeley), Algorithms (CS 170 at UC Berkeley), Machine Perception, Information Theory, Deep Learning.
Graduate courses at Georgia Tech:
Control courses: Linear Systems and Controls (ECE 6550), Nonlinear Systems and Control (ECE 6552), Optimal Control and Optimization (ECE 6553), Autonomous Control of Robotic Systems (ECE 6562).
ML courses: Statistical Machine Learning (ECE 6254), Mathematical Foundations of Machine Learning (ISyE 7750), Machine Learning Theory (CS 7545), Computational Data Analysis (CSE 6740).

PROFESSIONAL ACTIVITIES

Conference Review: NeurIPS 2020, NeurIPS 2021, RSS 2021, ICLR 2022, AISTATS 2022.
Journal Review: Neurocomputing.

HONORS AND REWARDS

Georgia Tech's Level A Premier Merit-Based Scholarship *2020*
Second Prize in 2018 Undergraduate Electronics Design Contest *2018*
Third Prize in 2018 Intel Undergraduate Embedded System Contest *2018*
Outstanding Freshman Scholarship (Awarded to 30 among 6,500 students) *2016*