YUNBO ZHANG

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EDUCATION

Georgia Institute of Technology

B.S. in Computer Science   August 2015 - May 2018
Focus on Modeling & Simulation and Artificial Intelligence
Overall GPA: 3.95/4.0

Ph.D in Computer Science   August 2018 - Present
Focus on Reinforcement Learning, Character Animation, and Robotics Control

PUBLICATIONS

· **Zhang, Yunbo**, Wenhao Yu, and Greg Turk. "Learning Novel Policies For Tasks." International Conference on Machine Learning. 2019.

RESEARCH PROJECTS

Robotic Manipulation for Deformable Body   Jan 2019-Present
· Aim to train control policies for simulated robot to manipulate deformable bodies through simulation.

Swimming Creature Simulation   May 2017-Aug 2017
· Used Covariance Matrix Adaptation (CMA-ES) to solve for locomotion controllers for swimming creatures.
· Found locomotion controllers for creatures with various body plans (sea turtles, eels, and flatworms).

COURSE PROJECTS

· Tinkertoy simulator (C++ and OpenGL)
· Inverse Kinematic Solver (C++ and OpenGL)
· Flocking simulator with collision avoidance. (Processing)
· Diffusion-Reaction simulator for pattern generation (Processing)
· Procedural tree generator (Unity)
· Procedural "dragon" generator using Blobby implicit surfaces(Unity)
· Ray tracer that supports rendering for cones, cylinders, spheres, and triangle meshes.(Processing)

EXPERIENCES

PegasusCRM   Decatur, GA
Front-end/Back-end Developer   *Summer 2017 , Fall 2016*
· Performed operational and developmental tasks while working on a LAMP stack as a full-stack web developer.
· Developed the database and data processing pipeline for the company's calendar that enables integration and synchronization with Google Calendar.
· Developed a pipeline in PHP that parses and calculates data from financial residual files.

SKILLS

Programming Languages	Python, Java, C++, C, C#, Matlab, PHP,
Deep Learning Libraries	Tensorflow, Theano, Lasagne, Karas, Scikit-learn, OpenAI Baseline
Computer Graphics and Simulation Tools	Processing, OpenGL, DART, FleX