# Maksim Sorokin

✉ mksmsrkn@gmail.com        🌐 initmaks.github.io/about/        📞 580-495-97-95

## EDUCATION

### M.S., Computer Science
2017 - May 2020

**Georgia Institute of Technology**
*Atlanta, GA*

Specialized in: Computational Perception and Robotics

Advised by: Dr. C. Karen Liu

### B.S., Computer Engineering
2013 - 2017

**Izmir University of Economics**
*Izmir, Turkey*

Honor and High Honor Student

## EXPERIENCE

### Head Teaching Assistant
2018 - Present

*Artificial Intelligence class by Dr. Thomas Ploetz & Dr. Thad Starner*

- Helped organize and lecture the class of 900 students
- Led, supervised and guided the team of 16 Teaching Assistants
- Redesigned existing assignments, exams and, TA workflows

| **Python** | **Docker** | **Numpy** | **Pandas** | **jupyter** |

### Graduate Researcher
2018 - Present

*Computer Graphics Lab*

- Developed vision-based Deep Reinforcement Learning pipeline for object localization and manipulation for agents with egocentric view
- Planned 1st author SIGGRAPH Asia publication in May 2020

| **Python** | **Pytorch** | **Pybullet** | **Numpy** | **DDPG** | **SAC** | **TD3** |

### Project Mentor & Reviewer
Jan - Jul 2017

*Udacity - AI and Deep Learning programs*

- Mentored and guided 200+ students providing feedback on 1500+ projects
- Covering CNN, GAN, and RNN projects

| **Python** | **Tensorflow** | **Keras** | **Numpy** |

## AWARDS

### Scientific and Technological Research Council of Turkey
2017

Finalist of Country-wide Software Development University Competition

### Informatics Association of Turkey
2017

Best University Graduation Project - University Exhibition Visitors Choice

### Udacity DIDI - SDC challenge
2017

7th in round 1, and 12th in round 2 out of 2000 teams competition

### Izmir University of Economics
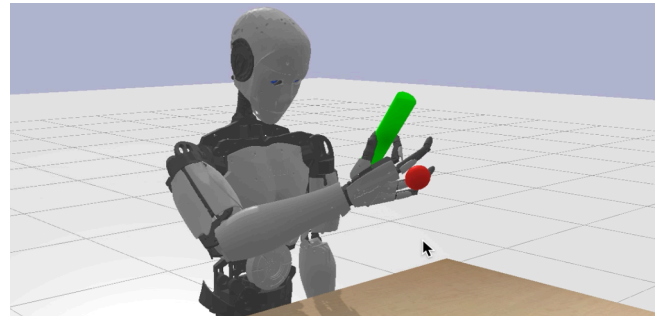2015-2017

Honor and High Honor Student Award Winner

## SKILLS

**Working:** Python, Pytorch, Numpy, Pandas, Tensorflow, Keras, OpenCV, Docker, ROS, Gazebo, PyBullet, git
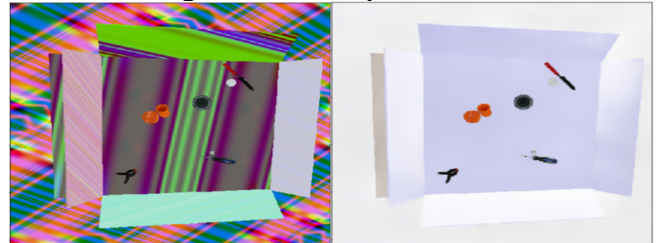**Basic:** C/C++, Lua

## PROJECTS

### Vision based object search and manipulation



- End-to-end vison based off policy reinforcement learning
- Modeling searching behaviour & manipulation
- Visual perception from egocentric point of view

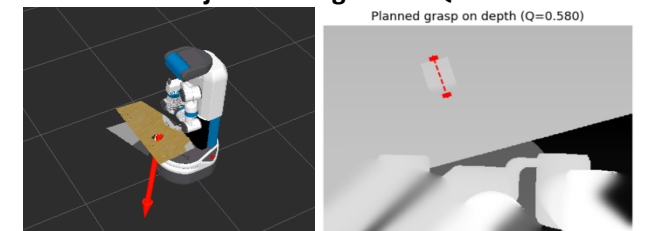| **Python** | **Pytorch** | **Pybullet** | **Numpy** | **DDPG** | **SAC** | **TD3** |

### Real2Sim Image Domain Adaptation



- Real to canonical image conversion using U-net
- Trained with 100% synthetic data for real world images

| **Python** | **UNET** | **Pytorch** | **V-REP** | **Numpy** | **fastai** |

### Fetch Robot Object Picking with GQ-CNN



- Navigation and object grasping ROS pipeline
- Using MoveIt! & GQ-CNN using Fetch robot in Gazebo

| **Python** | **Tensorflow** | **OpenCV** | **Gazebo** | **Docker** | **ROS** |

### Swinging Character Animation



- Learning to swing on pull up bar using Deep RL.

| **Python** | **C++** | **Tensorflow** | **DARTsim** |