# Xun Lin

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#### **EDUCATION**

## **Boston University College of Engineering**

Boston, MA

Master of Science in Electrical and Computer Engineering

expected in December 2019

**Data Specialization** 

GPA: 3.7/4.0

**Related Courses**: Learning from data, Advanced data structures, Digital Image Processing and Communication, Robot motion planning

# **Oklahoma State University**

Stillwater, OK

Bachelor of Science in Electrical Engineering

May 2018

Wentz Research Scholar, Dean's honor roll (Four semesters)

## **Southwest Jiaotong University (SWJTU)**

Chengdu, China

June 2018

Bachelor of Engineering in Electrical and Information Engineering

National Scholarship of China, Institute Grand Scholarship (Two semesters)

## **TECHNICAL SKILLS**

Programming Language: Python, C++, C, Java, JavaScript, PHP, HTML, Verilog Software: Linux, ROS, Matlab, Solidworks, Keil, PSPICE, Proteus, Altium Designer.

#### RESEARCH EXPERIENCE

## Visual Computing and Image Processing Lab, OSU

Sep 2016-March 2018

- Designed prototypes for autonomous mobile robot.
- Extract meaningful information regarding indoor environment with Orbbec astra depth camera.
- Analyzed the data by intelligent algorithms to solve 2D SLAM Problem.

#### **PROJECTS**

## **Robotic Arm Control, Boston University**

September 2018 – December 2018

- Performed a robot arm simulation in gazebo that automatically grab objects for users when it receives speech commands.
- Implemented arm motion planning with Kinematics and Dynamics Library.
- Applied deep learning directly on point sets for object segmentation and recognition.
- Bridged Alexa with ROS and implemented speech control for user interface.

## Indoor Public Place Guide Robot, OSU

February 2017 - May 2018

- Developed an autonomous robot with a camera on it to navigate in large, unknown and dynamic spaces.
- Analyzed depth camera data to get 2D grid map layouts of large scale unknown environments.
- Optimized the map using loop closure and SBA.
- Implemented robot localization using a particle filter to track the pose of a robot against a known map.
- Localized the robot during navigation by Implementing D\* algorithm.
- Built a robot-server-WebApp communication system using AWS.