# Xun Lin

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Github: <a href="https://github.com/scottlx">https://github.com/scottlx</a>

#### **EDUCATION**

## **Boston University College of Engineering**

Boston, MA

Master of Science in Electrical and Computer Engineering

expected in December 2019

**Robotics Specialization** 

**Oklahoma State University** 

GPA: 3.7/4.0

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

Stillwater, OK

Bachelor of Science in Electrical Engineering

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

May 2018

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

Chengdu, China

Bachelor of Engineering in Electrical and Information Engineering

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

rmation Engineering June 2018

I 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.