

# Tianbo Song

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## SUMMARY

M.S of Computer Engineering (CS Concentration) with job experience in Java development, project manager; Research experience in SWARM robotic. Seeking a research position.

## EDUCATION

M.S of Computer Engineering(CS Concentration)	Graduating 05/2020
Arizona State University, Tempe, AZ	3.37 GPA
B.S of Electrical Engineering	
Eastern New Mexico University	08/2012-05/2014
B.S of Network Engineering	
University of Electronic Science and Technology of China	08/2010-06/2014

## TECHNICAL SKILLS

**Data Analysis and Statistics:** MySQL, Pandas

**Design and Applications:** MATLAB, Mathematica, Multisim

**Programming:** Java, Python, JavaScript, C

**Robotics:** ROS, Gazebo

**Other:** Microsoft Excel, PowerPoint, Word, Prezi, Pages

## PROFESSIONAL EXPERIENCE

<b>CHINA HI-TECH GROUP CORPORATION</b>	11/2016 – 06/2018
<ul style="list-style-type: none"><li>• Restful style micro service calling &amp; SQL optimization</li><li>• SOA settlement &amp; workflow synchronization</li><li>• JSON big Data analyzation</li><li>• JingWei FangJi Zhuan Accessories Online-Market (<a href="http://beijian.ttfj.com/">http://beijian.ttfj.com/</a>)</li></ul>	
<b>BEIJING FUTURE TECH CO.LTD</b>	07/2014 – 10/2016
<ul style="list-style-type: none"><li>• Designed and in charge of construction in several “Building Intelligence Weak Electricity Systems”</li><li>• Hardware design in products of “Beijing Future Tech Smart Home System”</li></ul>	

## ACADEMIC PROJECTS

### ASU, SWARM robotic of obstacle avoidance

- Built up a SWARM based obstacle avoidance system in dynamic environment

### ASU, SWARM robotic of obstacle avoidance

- Built up a SWARM based target tracking system in ROS Gazebo

### ASU, Dynamic Emotion Replacement by Face Recognition and Camera tracking

- Built up an emotion dynamic face recognition and tracking system such that the face could be mosaiced with emoji to realized privacy protection in video stream.

### ASU, Robot movement planning(snake arena)

- Designed a two-agent game with Genetic Algorithm, where the agents are able to learn how to fight with each other along the game

### ENMU, Dynamic Timing Password Lock

- An Electronic password lock which password depend on digit number and time frame.

## OTHER WORK EXPERIENCE

<b>Eastern New Mexico University, Portales, NM: EEE/CSE 110 Tutor</b>	08/2013 – 12/2013
<ul style="list-style-type: none"><li>• Tutor undergraduate engineering students in Logic circuit design</li></ul>	

## NEW FOCUS

### EMD ON STOCK MARKET

5/2020– Present

Recently I'm focusing on EMD analyzation on stock market, may involve machine learning to build the experience function.