# JASON CHEN

jasonchen2021@u.northwestern.edu                                  (617)-584-8949
www.linkedin.com/in/jasonchen1998                              github.com/chen2156
Online Portfolio: https://chen2156.github.io

## Education

Northwestern University                                              Evanston, IL
Master of Science in Robotics                                     December 2021

Purdue University                                              West Lafayette, IN
Bachelor of Science in Computer Engineering                          May 2020

## Technical Skills

Computer Language: Python, MATLAB, Java, C, R, Verilog, C++, Bash, Linux, MySQL,  PHP
Software/Tools: Pycharm, Unix/Linux, NetBeans, Arduino, Vim, QGIS, Visual Studios, OpenGL, GitHub,
ispLever, ESP32 Microcontroller, ROS, Turtlebot3

## Work Experience

***Purdue University***                                     ***West Lafayette, IN***
*Undergraduate Teaching Assistant*                    January 2020 – August 2020

- Assisted students troubleshoot problems during lab office hours
- Attended weekly meetings with other teaching assistants and professors
- Assisted Graduate Teaching Assistant in grading students' homework
- Worked on ECE 20875, Python for Data Science
- Continued to work job remotely during Covid-19 Pandemic

***ECE Shop***                                         January 2020 – August 2020

- Managed inventory of ECE Shop to help students locate spare electronic parts for lab courses
- Handed out lab kits to students taking various lab-based ECE courses
- Fixed broken lab equipment
- Made sure shop was kept in a clean and organized fashion
- Worked on the development of website for ECE shop remotely during Covid-19 Pandemic

## Research Experience

***Georgia Institute of Technology***                              ***Atlanta, GA***
*Civic Data Science REU, Undergraduate Researcher*            May 2019 – July 2019

- Conducted NSF funded research on fire truck delays at traffic light intersection
- Analyzed fire truck location data to determine behavior at intersection using QGIS
- Implemented filters to remove uninteresting points using Python
- Created analysis-based visualizations using leaflet.js: https://cav.ce.gatech.edu/

*Florida International University*                                             *Miami, FL*
*NSFDOD REU, Undergraduate Researcher*                     May 2018 – August 2018

- Conducted NSF funded research on routing protocols for ad-hoc networks for swarms of drones
- Compared routing protocols based on how well drones routed data from one point to another using MATLAB

## Academic Projects

*Purdue University*

*Robotic Arm-Arduino*

- Semester long project for Senior Design
- Controlled a Robotic Claw using Arduino IDE
- Used servo motors to move and hold robotic arm's joints
- Controlled motor positioning using PWM signal generated from esp32 WROOM chip
- Attempted to mimic human arm and hand movement wirelessly via Bluetooth

*Pong-Embedded C*

- Final project for Embedded Systems Design Class
- Programmed Pong on an LCD display using Embedded C
- Controlled paddles using joysticks wired on breadboard

*Steganography-Python*

- Final Project for Software Engineering Class
- Embedded colored image inside an image carrier and then extracted embedded image out without affecting its visual appearance
- Used Qt Designer, a GUI designer, to implement program in a GUI application