JASON CHEN

jasonchen2021@u.northwestern.edu github.com/chen2156

Master of Science in Robotics

(617)-584-8949

linkedin.com/in/jasonchen1998 Robotics Portfolio: chen2156.github.io

EDUCATION

Northwestern University

orsity

Evanston, IL Dec 2021

Purdue University

West Lafayette, IN

Bachelor of Science in Computer Engineering

May 2020

Technical Skills

Programming: Python, MATLAB, Java, C, R, Verilog, C++, Bash, Linux, SQL, PHP

Robotics: Robot Operating System (ROS), SLAM, Gazebo, Rviz, Turtlebot3, Baxter, Arduino Cloud: AWS EMR (PySpark/Python), Athena, S3, Lambda, Step Functions, Azure, QGIS, Git, (ESP32, STM32, PIC32) Microcontroller, JIRA, Pytest, MacOS, Windows

Experiences

Galileo Financial Technologies Software Engineer – Risk & Fraud

Sandy, UT (Remote)

Feb 2022 – Present

- Developed and automated unit testing process/pipeline for Dynamic Fraud Detection Engine using Pytest, improving reliability and reducing failure rate of rule change updates
- Built a pipeline in AWS EMR that automated data collection, data cleaning, and engineering to ensure scalability and improved ML training time to help determine fraudulent transactions
- Participated in design meetings by providing meaningful suggestions that helped the team progress through the design planning process as well as learned more about industry trends and practices

Symbotic Wilmington, MA

Machine Learning Intern

Jun 2021 – Sep 2021

- Collected multiple months worth of training data for Bot Health Monitor ML model to upload into **Azure** blob containers and documented information about data on **JIRA**
- Implemented a process to categorize and sanitize incoming data stream to gather ML model training data

Purdue University

West Lafayette, IN

Undergraduate Teaching Assistant

Course: ECE 20875, Python for Data Science

Jan 2020 – Aug 2020

Electrical and Computer Engineering (ECE) Shop

Jan 2020 – Aug 2020

Managed inventory of ECE Shop to help students locate spare electronic parts for lab courses as well as fix broken lab equipment and hand out lab kits to students taking various ECE lab courses

Georgia Institute of Technology

Civic Data Science REU, Undergraduate Researcher

Atlanta, GAMay 2019 – Jul 2019

- Conducted NSF funded research on fire truck delays at traffic light intersections by analyzing fire truck location data to determine behavior at intersections using QGIS
- Created analysis-based visualizations using leaflet.js: https://cav.ce.gatech.edu/

Florida International University

Miami. FL

NSFDOD REU, Undergraduate Researcher

May 2018 – Aug 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 point to point using MATLAB

Academic Projects

Robotic Arm-Arduino

- Controlled a Robotic Claw using an Arduino IDE in a semester-long project for Senior Design
- Created a servo motor equipped robotic arm that was controlled using PWM signals transmitted over bluetooth from a user-controlled glove powered by ESP32 chip

Pong-Embedded C

Programmed Pong on an LCD display using Embedded **C** by controlling paddles using joysticks wired on breadboard as a final project for Embedded Systems Design Class

Steganography-Python

Embedded a colored image inside an image carrier and then extracted the same embedded image out without affecting its visual appearance using Qt Designer, a GUI designer, to implement program