ANIO ZHANG

github.com/aniozhang || Linkedin || Personal website || Email
Boston, MA, USA || 857-423-4772

EDUCATION

Northeastern University, Boston, MA *Sept. 2023 - Current*
Master of Science in Information Systems - 3.5/4.0
Founder of the Khoury Robotics club

Shanghai Normal University, Xuhui District, Shanghai *Sept. 2019 - Jun 2021*
Master of Arts in Education - 3.3/4.0

SKILLS

- **Languages**: Python, C++, Java, Matlab, R
- **Tools**: PyTorch, GitHub, Arduino, 3D Printing, Laser cutting

ACADEMIC PROJECTS

- **AI Plagiarism Detector** *March. 2024*
  - Developed a system that tells weather an essay was written by an AI or human.
  - Experimented with many pre-trained models, tune the hyper parameters and the best combination which included DistilBERT resulted in an accuracy of 79%.
- **Robot Arm** *Jan. 2024*
  - Built a 3 axis robot arm using 3D printed parts and servos that can be controlled by a CLI.
  - Wrote code to transform real world co-ordinates into the angles of the joints so that the arm can be positioned accurately by inverse kinematics control.
- **Bipedal Robot** *Feb. 2024 - current*
  - Designed a 3D printable bipedal robot with 6 degrees of freedom.
  - Utilized the RP2040 micro controller in combination of a 9 axis IMU to control the robot.
  - Developing the firmware that allows the bot to walk on any surface.
- **Combat Robotics** *Nov. 2023 - current*
  - Designed and 3D printed a combat robot from TPU that rotates its entire body to increase the kinetic energy of the bot.
  - Implemented firmware that allows such a spinning robot to be controlled by modulating the speed of the motors based on the current heading of the robot.
- **MBTA-Tracker** *Jan. 2024 - Feb. 2024*
  - Built a website to track the buses operated by MBTA using HTML CSS and Javascript.
  - Retrieved the data related to the buses using the open API offered by the MBTA. The coordinates are parsed and are converted to Spherical Mercator Projection to be displayed on the map.
- **K-Means and KNN used to detect lies** *Dec. 2023*
  - Implemented a version of the K-Means and KNN algorithm on a dataset to detect if a person is telling a lie or not.
  - Analyzed the the bias-variance trade off by varying the value of K and attained a maximum accuracy of 95.6%.