Licheng Zheng



🗫 Skill Set

- Familiar with C++, Python, HTML, CSS.
- Basic experience in Vue, JavaScript, Java, SQL, CUDA programming.
- Hands-on experience in Ubuntu and git on daily basis.
- Comprehend C-Compiling methods, machine learning, deep learning.

Education

Shanghai University School of Computer Engineering and Science Artificial Intelligence major Sep 2021-Now

Projects

School Research	Research on automatic descriptor acquisition method for	May 2022 - Mar 2023
NASICON electrolyte		

Overview: Using the text mining method, descriptors can be extracted from small batch of NASICON solid electrolyte documents and trained based on this model to achieve automatic and efficient acquisition of NASICON solid electrolyte descriptors.

Content: Using Vue to develop front-end interfaces and the back-end deployment using **Springboot** to communicate with **MySQL** and **Neo4j** databases. BERT algorithm are deployed using **Pytorch** for paper processing, and the extracted descriptors are used to construct the knowledge map using **Neo4j** database.

Group Project	Computer Vision Algorithm Recognition System for	Oct 2021 - Dec 2022
	RoboMaster Robots	

Overview: Through the video stream of industrial camera deployed on the robot, this project can identify enemy robots' armor plates, and publish the target coordinate information to lock the platform at the recognition center. Its performance is similar to a self-aiming plugin in First-person shooting games.

Content: The Yolo network is deployed on **Ubuntu** using **CUDA**. Kalman filter and trajectory model are used to improve the impact point of the projectile and achieve accurate strike.

Awards

•	Third prize in RoboMaster 2022 University Champio	onship. Aug 2022	$\overline{2}$

• First prize in The 35th Shanghai Youth Science and Technology Innovation Competition. Apr 2020

• First prize in Shanghai Youth Robot Knowledge and Practice Competition. Nov 2018, and Nov 2019

• First prize in Shanghai Youth AI Competition. Nov 2018

郑力铖





♠ 编程经验

- 熟悉 C++、Python、HTML、CSS; 了解 Vue、JavaScript、Java、SQL。
- 熟悉 bash、git、机器学习、深度学习; 了解 C 编译原理、CUDA 编程。

☎ 教育经历

• 上海大学 计算机工程与科学学院 人工智能系

2021.9-今

👛 项目经历

面向 NASICON 型电解质的描述符自动获取方法研究 校内科研

2022.05 - 2023.03

项目概述:利用文本挖掘方法,从小批量 NASICON 型固态电解质文献中,抽取描述符并以此构建模型进行训练, 实现自动、高效地获取 NASICON 型固态电解质描述符。

项目开发: 使用 Vue 开发前端界面,后端开发使用 Springboot 与 MySQL 数据库进行通信。Pytorch 部署 BERT 算法用于论文处理,提取出的描述符使用 Neo4j 进行知识图谱的建构。

团队项目 面向 RoboMaster 机器人的计算机视觉算法识别系统 2021.10 - 2022.12

项目概述:通过部署在机器人云台上的工业相机的视频流,识别敌方机器人装甲板与能量机关,并发布目标坐标信 息使云台锁定在识别中心。其效果类似于 自瞄外挂。

项目开发: 在 Ubuntu 上利用 CUDA 部署 yolo 网络进行识别,并通过卡尔曼滤波与弹道模型,预测运动轨迹以改 善弹丸落点,实现精准打击。

♀ 获奖经历

• 第二十一届全国大学生机器人大赛 RoboMaster 机甲大师超级对抗赛全国赛 三等奖

2022.08

- 第三十五届上海市青少年科技创新大赛 计算机科学《基于图像识别技术识别简单乐谱并演奏》一等奖2020.04
- 上海市青少年机器人知识与实践比赛 智能驾驶项目 中学组 一等奖

2018.11/2019.11

• 首届上海市青少年人工智能挑战赛 智能驾驶锦标赛 高中组 一等奖

2018.11