RAY(LEI) ZHANG

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EDUCATION

Fudan University, Shanghai, China   *2018 - Present*
D.Eng in Electronics and Information   **GPA: 3.5/4**

University of Shanghai for Science and Technology, China   *2015 - 2018*
MA in Computer Technology

Jiangsu University, China   *2011 - 2015*
B.S in Software Engineering

SKILLS & INTEREST

Software: Python, Matlab, C++, Java, Linux, Git, Pytorch, etc. *Kaggle*

Research Area: Robotics Vision, Medical Imaging, Machine Learning.

SELECTED PUBLICATIONS

1. Zhang L, Shang H, Lin Y. A novel distribution for representation of 6D pose uncertainty. Micromachines. 2022;13(1).

2. Zhang L, Wu L, Wei L, Wu H, Lin Y. A novel framework of manifold learning cascade-clustering for the informative frame selection. Diagnostics. 2023;13(6).

3. A Lightweight Subgraph-Based Deep Learning Approach for Fall Recognition. Sensors. 2022; 22(15).

PROJECTS

1. An Indoor Localization Application in Emerson Factory
Project Officer, University of Shanghai for Science and Technology

Developed a GUI with a map function that could display the position in real time. In terms of hardware, integrated a GPS module to the WirelessHART node.

Developed an algorithm to analyze the collected data, meanwhile integrated OPC module communication with the gateway.

2. Data Monitoring Platform for Wine Industry
Project Assistant, University of Shanghai for Science and Technology

Worked with a team of three to develop a B/S platform, database, and algorithm for over 200 winery users and government officers, optimized SQL storage structure for limited searching time, automatically generate the production and sales reports by region, season, month or year and display it to the local officers.

3. Grasping Novel Objects Using Unstructured Scenarios
Project Officer, Fudan University, Video

Developed a vision algorithm based on point cloud that generates 6-DoF grasp hypotheses and used a deep-learning approach to get the optimum grasping pose by an Intel *Realsense* 3D camera.

WORK EXPERIENCE

Roadefend, Shanghai   2019 - 2019
Algorithm Engineer Intern

· Worked with the project leader to implement a face recognition algorithm on DMS(driver monitoring system) device, including data clean, model training and algorithm evaluation.

Kyligence, Shanghai   2017 - 2018
Data Engineer Intern

· Worked at a team of Development and Operations for Kylin(An online language analysis platform) on building an automation platform at AWS and Azure for log analysis.

AwiaTech China, Shanghai   2015 - 2017
Software Engineering Intern

· Replicated a host application for monitoring WirelessHART devices with Java Swing technology.
· A customized host application that implements WirelessHart host communication with PLC device based on observer pattern.
· Lead a project that cooperated with China Petroleum to upgrade its field instruments to support the WirelessHART protocol. Meanwhile, I developed an IoT monitoring system to predict the status of devices and alert prior to the error.

SELECTED HONORS

2017 Second Prize of International Innovation and Entrepreneurship Competition in Shanxi
2016 Second Prize of Industrial Internet of Things Competition in Yinchuan

CERTIFICATIONS

SG Healthcare AI Datathon EXPO. 2022

Machine Learning. Coursera. 2023

Deep Learning Specialization. Coursera. 2020

Robotics Software Engineer Nanodegree. Udacity. 2020