Huatao Xu

Master Student

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Education

Shanghai Jiao Tong University (SJTU) *Shanghai, China*
Master of Software Engineering, GPA: 3.51/4.0, Advised by Prof. Dong Wang ***Sept. 2017 - Mar. 2020***

Nanjing University (NJU) *Nanjing, China*
Bachelor of Software Engineering, GPA: 4.05/5.0 ***Sept. 2013 - Jun. 2017***

Publication

FaHo: Deep Learning Enhanced Holographic Localization for RFID tags
Huatao Xu, Dong Wang, Run Zhao, Qian Zhang
ACM SenSys 2019
Design a new hologram called joint hologram and propose a new hologram-based position estimation method for accurate RFID tag localization.

AdaRF: Adaptive RFID-based Indoor Localization Using Deep Learning Enhanced Holography
Huatao Xu, Dong Wang, Run Zhao, Qian Zhang
ACM IMWUT (UbiComp) 2019
Propose an RFID-based localization system that creates adaptive localization models for stable environments using synthetic aperture technique and deep learning algorithm.

PEC: Synthetic Aperture RFID Localization with Aperture Position Error Compensation
Run Zhao, Dong Wang, Qian Zhang, Haonan Chen, Huatao Xu, **Huatao Xu**
IEEE SECON 2019
Present an accurate synthetic aperture RFID localization system considering aperture position error compensation.

PRMS: Phase and RSSI based Localization System for Tagged Objects on Multilayer with a Single Antenna
Huatao Xu, Run Zhao, Qian Zhang, Dong Wang
ACM MSWiM 2018
Design a system that estimates the spatial positions of RFID tags using both phase and RSSI profiles provided by a single antenna.

Projects

RFID-based Deep Learning Enhanced Holographic Localization System ***2019***
- A Python project that analyzes RFID signals and estimates positions of RFID tags based on Tensorflow.

Student Work Traceability Display System ***2018***
- A platform for primary school students to share videos of the processes of making handmade products.
- Responsible for the C# program that displays and records video data captured by HIKVISION cameras.

RFID Sensing Platform *2017*

- An extensible C# program that collects and displays low level RFID signals profiles reported from ImpinJ reader using LLRP protocol.
- Responsible for implemention of localization algorithms and program controlling RFID readers and linear guide simultaneously.

Systematic Evaluation System *2017*

- A website where users can search literature with key words, which is constructed based on Python Django framework.

Experience

Nanjing Yikemi (Start-up company) *Nanjing, China*

Software Engineer Intern ***Jan. 2017 - Jun. 2017***

- Develop websites for Online Course Platform and Student Data Sharing Platform, which are both entrepreneurial projects.

Honor & Award

2020 **Shanghai Outstanding Graduate Student**, **SJTU**

2019 **China National Scholarship**, **SJTU**

Highest national wide scholarship for postgraduate students in China

2017-2019 **First-class Scholarship**, **SJTU**

2017 **Nanjing University Inspirational Scholarship**, **NJU**

Skills

Languages Python, Java, JavaScript, Latex, Matlab, C#

Frameworks Tensorflow, Django, J2EE, Vue.js

Tests TOEFL(iBT) - 97 (R-27 L-25 S-21 W-25)

GRE - 324 (V-154 Q-170) + 3 (AW)

others Good communication skills and strong work responsibility