Yurui Zhou

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EDUCATION

CARNEGIE MELLON UNIV
MS in Electrical Computer Engineering
Expected May 2015
Pittsburgh, PA
Cum. GPA: 3.5

TSINGHUA UNIV
BS in Mechanical Engineering
July 2013
Beijing, China
Cum. GPA: 87.45 / 100

LINKS

Github:// nozyr
LinkedIn:// yuruiz

COURSEWORK

CURRENTLY TAKING
Computer Network
Distributed Embedded System
Embedded Realtime System
Distributed System

GRADUATE
Computer Architecture
Network Security
Wireless Network

UNDERGRADUATE
Operating Systems
Design Circuit System + Practicum
Computer Hardware Technology
Data Structure

SKILLS

PROGRAMMING
Over 5000 lines:
C • Python
Over 1000 lines:
Shell

SOFTWARE
Proficient:
Cadence • ProE • LaTeX
Familiar:
Matlab • AutoCAD

EXPERIENCE

VESTIBULAR SENSING&POSTURAL STABILITY MONITORING
Collaborative Innovation Research Center | Research Assistant
Feb 2014 – August 2014 | Pittsburgh, PA

The goal of this project is a behaviorally transparent postural monitoring device with wireless data collection capability and a user-friendly posture stability and balance health dashboard that will empower seniors and their healthcare providers to prevent falls and avoid traumatic injuries.

- Circuit design, assembly and functional testing (lab and field) of the wearable inertial measurement system.
- Firmware Programming and integration of Bluetooth Low Energy.

MINE TUNNEL SENSOR NETWORK
Cui Tianhong Research Group | Engineer
Jan 2013 – Dec 2013 | Beijing, China

The goal of this project is a robust sensor network inside mine tunnel to help the tunnel manager to learn the position and status of workers in real time and to assist rescue operation in case of emergency such as tunnel collapse.

- Circuit design and assembly of the sensor network sink/slave node.
- Sink node and slave node software firmware developing.
- Implemented the localization algorithm and self organization algorithm.

PROJECTS

SECURED BITCOINS LOANS
Head Graduate Research
Jan 2014 – May 2014 | Beijing, China

Proposed a solution to minimize trust needed in secured loans using a peer-to-peer bitcoin contract.

- Collateral architecture and protocol design.
- Designed and implemented the distributed contract program based on bitcoin protocol

CAMPUS WIDE EXPRESS DELIVERY LOCKERS
Head Undergraduate Research
Jan 2012 – Apr 2013 | Beijing, China

This project propose a campus-wide solution to the problem of express delivery problem within campus by providing express delivery lockers through out the campus. The locker is integrated with the delivery tracking system so that the client would be able to check the location and availability of lockers.

- Design the lockers architecture to enable remote control and monitor.
- Develop the locker program to enable customer identity generation.

AWARDS

2012	1st/300	Tsinghua Campus Enhancement competition 2012
2012	top 2nd/200	Beijing Mechanical Design Competition
2012	top 2st/150	Tsinghua Challenge Cup 2012
2010	top 2st/60	Tsinghua Mechanical Design Competition 2010
2008	top 3st/700	National Physics competition
2007	1st/60	International Robot Olympiad
2007	1st/80	National Robot Olympiad of senior high school