

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

GRADUATE

Machine Learning
Distributed System
Computer Architecture
Network Security
Wireless Network

UNDERGRADUATE

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

SKILLS

PROGRAMMING

Over 5000 lines:

C • Shell • Python

Over 1000 lines:

C++ • L^AT_EX

Familiar:

Assembly • Javascript

SOFTWARE

Proficient:

Cadence • ProE

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