(913)235-1070 || victoria.chen.wu@gmail.com || vptarmigan.wordpress.com

## **EDUCATION**

Bachelor of Science, Computer Science University of Missouri - Kansas City, Kansas City, MO expected December 2014

# COMPUTER SKILLS

Languages & Software: C++, Python, Java; ROS, Arduino Operating Systems: Windows, Linux

#### RESEARCH EXPERIENCE

University of Maryland, College Park MD

Summer 2014

GPA: 3.9/4.0

Space Systems Lab

NSF Mini Robot REU Research Fellow

Research Advisor: Dr. Dave Akin

- Implemented application using ROS and ARToolkit to track pose of small satellite base using visual markers
- Application to be used to verify dynamics of base reaction to attached manipulator movement in parabolic flight
- Presented work at interactive poster session to other REU students

University of Missouri - Kansas City, Kansas City MO

Fall 2013 - Spring 2014

School of Computing and Engineering

Research Advisor: Dr. Praveen Rao

- Developed framework for testing optimization algorithms for federated SPARQL queries for RDF data
- Researched essential methodologies of exisiting SPARQL query engines

Auburn University, Auburn AL

Summer 2013

Department of Computer Science and Software Engineering

NSF REU on Smart UAVs Research Fellow

Research Advisor: Dr. Saad Biaz

- Collaborated with teammate in designing and implementing distributed collision avoidance framework using ROS in C++
- Experimentally verified architecture with flight tests
- Presented literature review and final results to REU group
- Awarded Best Undergrad Technical Poster for poster presentation at MINK-WIC (Missouri Iowa Nebraska Kansas Women in Computing) conference

### EXTRA-CURRICULAR ACTIVITIES

Chair, ACM Student Chapter

Fall 2013 - Spring 2014

Secretary, ACM Student Chapter

Fall 2012 - Spring 2013

- Coordinated volunteers and hosted student teams for IEEE Xtreme competition
- Organized and led weekly programming practices
- Taught sessions on basic programming concepts (data structures, graph implementation)

Programmer, UMKC Robotics Team

Spring 2012 - Spring 2014

Secretary, UMKC Robotics Team

Fall 2012 - Spring 2013

 Designed and implemented communication interface in ROS between main motherboard and Arduino

- Implemented high level logic on Arduino for sensing and autonomous navigation through a semi-randomized 2d playing field
- Implemented ROS node in C++ to interface with Phidget IMU and output raw IMU data
- Wrote Arduino sketch that cycled through notes of a pre-programmed melody using a capacitive sensor and speaker

Peer Mentor, UMKC School of Computing and Engineering

Fall 2012 - Spring 2013

## **PUBLICATIONS & PRESENTATIONS**

Cunningham, A., Wu, V., Biaz, S., & Jones, D. "Decentralized Collision Avoidance Framework for Unmanned Aerial Vehicles." Technical Report, Auburn University. 2013.

Cunningham, A., Wu, V., Biaz, S., & Jones, D. "Decentralized Collision Avoidance Framework for Unmanned Aerial Vehicles." Poster session presented at: 2nd Biennial Missouri Iowa Nebraska Kansas - Women in Computing Conference; 2013 October 15-16; Kansas City, MO.

### HONORS & AWARDS

Vice Chancellor for Student Affairs and Enrollment Management Honor Recipient

UPE/ACM Scholarship Recipient

October 2014

Best Undergrad Technical Poster, MINK - WIC Conference

Outstanding Senior, UMKC SCE Bachelor of Science in Computer Science

3rd place team, CCSC Central Plains Programming Contest

November 2014

October 2013

2013

## COMMUNITY SERVICE

Robot Competition Design committee member, 2016 IEEE R5 Annual Mtg Fall 2014 - Current CS Tutor, UMKC UPE student chapter Fall 2013 - Spring 2014 FIRST Tech Challenge Qualifications, Scorekeeper Feb 2013 FIRST LEGO League Qualifications, Robot Design Judge Dec 2012