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

**EDUCATION** Bachelor of Science, Computer Science

GPA: 3.9/4.0

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

**EXPERIENCE** 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 - Current

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

## **PROJECTS**

- 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.
- Wrote Python script to convert online fiction to EPUB format.

WORK EXPERIENCE Maritz Research

Editor

Jan - July 2012

Overland Park, KS

- Analyzed, identified, and improved key issues with customer reports.

Plano Day School

Sept - Dec 2009

Teacher's Assistant

Plano, TX

- Tutored elementary students with school homework.

Howard Lee Harkness, Violin Teacher Dec 2008 - Feb 2009 Piano Accompanist Plano, TX

- Rehearsed with and accompanied violin students in a culminating recital.

EXTRA-
CURRICULAR
ACTIVITIES

Chair, ACM Student Chapter Fall 2013 - Current Secretary, ACM Student Chapter Fall 2012 - Spring 2013 Member, ACM Student Chapter Fall 2011 - Current

Secretary, UMKC Robotics Team Fall 2012 - Spring 2013 Programmer, UMKC Robotics Team Spring 2012 - Current

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 & PRESENTA-TIONS

- 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 November 2014

UPE/ACM Scholarship Recipient October 2014
Best Undergrad Technical Poster, MINK - WIC Conference October 2013
Outstanding Senior, UMKC SCE Bachelor of Science in Computer Science 2013
3rd place team, CCSC Central Plains Programming Contest 2012

## COMMUNITY SERVICE

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