

## **EDUCATION**

*Bachelor of Science, Computer Science, December 2014* GPA: 3.8/4.0  
University of Missouri-Kansas City, Kansas City, MO

## **RESEARCH EXPERIENCE**

*University of Maryland, College Park MD* Summer 2014

Space Systems Lab

NSF Miniature Robotics REU Research Fellow

Research Advisor: Dr. Dave Akin

- Implemented application using ROS and ARToolkit to track pose of small satellite base using visual markers

*University of Missouri - Kansas City, Kansas City, MO* Fall 2013 - Spring 2014

Undergraduate Research Assistant, Research Advisor: Dr. Praveen Rao

- Developed framework for testing optimization algorithms for federated SPARQL queries for RDF data using Jena library

*Auburn University, Auburn, AL* Summer 2013

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++

## **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

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 | 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          |

**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 |