# Dexter Duckworth

Curriculum Vitae Dec. 13<sup>th</sup>, 2013

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### Education

**Degree** B.S., Computer Engineering Mississippi State, MS

**Expected Graduation** May 2015 **Current GPA** 3.92/4.0

**University** Mississippi State University

#### **Publications**

**Duckworth, D.**, Shrewsbury, B., and Murphy, R. R., "Run the Robot Backward: Lessons Learned in Nuclear Forensics." Presented at the 11<sup>th</sup> IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR 2013), Linköping, Sweden, October 2013

#### Awards and Honors

President's Scholar Student Publication Award

Shackouls Honors College Presenter at SSRR Conference 2013
Phi Kappa Phi Honors Society Presenter at C4D REU Poster Session

## Research Experience

Lab Center for Advanced Vehicular Systems Mississippi State University

Mentor Dr. Daniel Carruth, Dr. Cindy Bethel

**Membership** November 2013 - Present

**Activities** I am working on the CRES-GV project in which I am creating a virtual test bed environment

using robot simulation software.

Lab STARS Lab Mississippi State University

MentorDr. Cindy BethelMembershipJanuary 2012 - Present

Activities I am the project lead on the robot intent project, which involves programming an au-

tonomous robot to display pending actions and to accept override commands from a user.

I have also worked on several Arduino-based projects.

Lab CRASAR Lab Texas A&M University

Mentor Dr. Robin Murphy
Membership June 2013 - August 2013

**Activities** I analyzed radiological sensor data from a live nuclear exercise and used the results to

design a robot sensor payload for the localization of radiation. The findings were presented

at the SSRR 2013 conference.

### **Employment**

Job TitleInformation AssistantEmployerMississippi State HousingDatesJanuary 2012 - December 2013

**Duties** I provided information to students and acted as a liaison between residents and housing

staff.

Job Title Tutor

**Employer** Mississippi State Student Outreach

Dates January 2013 - May 2013

**Duties** I tutored students in Calculus, Physics, and Electronic Circuits.

### Service

**Activity** SWAT Training Participant

Dates November 2013

**Description** I played the part of a criminal in a training exercise by the Starkville SWAT team in coordi-

nation with the STARS lab.

### Skills

Python	Three years of experience with Python applied to research robots such as the Turtlebot2.
ROS	Experience with the use of the Robot Operating System (ROS) in a laboratory setting to build projects and integration with RosPy
Git	As a project lead, I have used Git version control software to manage project source code with oversight of eight members of the development team.
C/C++	Experience with Arduino-based C and the use of C/C++ as part of Operating System Design.
Web	Experience with PHP, HTML/CSS, and SQL for the design of a web-based inventory management systems for the STaRS lab.
Soldering	Four years of experience with both surface-mount and through-hole soldering.
Verilog	Multiple classes on Verilog, FPGA-based development, and digital design.

## Professional Memberships

IEEE, IEEE Robotics and Automation Society, IEEE Computer Society

2013-Present