# **ALEXANDER LALEJINI**

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#### **EDUCATION**

## Mississippi State University

Present

Degree: Computer Science Expected Graduation: May 2015

GPA: 4.0

### RESEARCH EXPERIENCE

## Laboratory for Autonomous Systems Research (LASR)

May 2014 - Present

Naval Research Laboratory

- · Mentor: Dr. Greg Trafton, Dr. Laura Hiatt
- · I am working on using dynamic context produced by a computational cognitive model to improve a neural network based object recognition system.

## Center for Advanced Vehicular Systems (CAVS)

January 2014 - Present

Mississippi State University

- · Mentor: Dr. Daniel Carruth, Dr. Cindy Bethel
- · I have worked on the ITAR restricted CRES-GV project, which involved writing software to integrate robotic platforms in a vehicle simulation software package.

## Social, Therapeutic, & Robotic Systems (STaRS) Laboratory

August 2013 - Present

Mississippi State University

- · Mentor: Dr. Cindy Bethel
- · I have worked as the project co-lead on the Robot Intent and Control Project. The project involved developing a system that allows for supervisory command and control of an autonomous robot platform using a variety of interfaces. This system was used in an experiment that measured the relative success of each interface.

### **EMPLOYMENT**

# Naval Research Laboratory (NRL)

May 2014 - Present Washington, D.C.

NREIP Intern

- · Supervisor: Dr. Greg Trafton, Dr. Laura Hiatt
- · Summer 2014 undergraduate research position at the Laboratory for Autonomous Systems Research

# Mississippi State University Computer Science Department

November 2013 - Present

Mississippi State, MS

Undergraduate Research Assistant

- · Supervisor: Dr. Cindy Bethel
- · I work as an undergraduate research assistant in the STaRS lab.

# Jet Propulsion Laboratory (JPL)

Summer 2012 Pasadena, CA

USRP Intern

· Supervisor: William R. Johnson

· I provided Earth Science software support; I developed a radiometer calibration application using Enthought Python. The application coordinated the automation of multiple calibration instruments via serial communication and provided the user with real-time data visualization from the calibration process.

### Mississippi State University Physics Department

Undergraduate Research Assistant

Fall 2011 - Spring 2012 Mississippi State, MS

· Supervisor: Dr. Angelle Tanner

· I wrote various data analysis and image processing scripts primarily for data collected at the Palomar Observatory.

## Naval Research Laboratory (NRL)

Summers of 2011, 2010, 2009

Computer Clerk (2011), SEAP Intern (2010, 2009)

John C. Stennis Space Center, Mississippi

· Supervisor: Dr. Bruce Lin

· I worked on a battlespace management interface written using the World Wind Java SDK. I also implemented a clustering algorithm for use in classifying sparse data points.

### **TECHNICAL SKILLS**

**Computer Languages** Python, C/C++, Java

Software Tools & Libraries Robot Operating System (ROS), Enthought Python, Scipy, Numpy

Version Control GIT

Robots Kobuki TurtleBot 2, Dr. Robot Jaguar

Web PHP, HTML/CSS, SQL Operating Systems Linux, Windows, Mac OS

#### AWARDS AND HONORS

• President's Scholar (Fall 2011 - Present)

Meritorious Award in Bagley Undergraduate Research Poster Competition (Poster title: Robot

• Shackouls Honors College

Control)

### **SERVICE**

### **SWAT Training Participant**

November 2013 - Present

Mississippi State University

· I am a volunteer in monthly training exercises by the Starkville SWAT team in coordination with the STaRS

## National SeaPerch Challenge Volunteer

May 2014

Hattiesburg, MS

· I was a poolside judge for the Heist Challenge.