# David Millard

https://dmillard.github.io

Ph.D. Student Cognitive Learning, Vision, and Robotics Lab Computer Science Department University of Southern California Ronald Tutor Hall Room 420 3710 McClintock Ave Los Angeles, CA 90089 dmillard@usc.edu

## Education

University of Southern California Los Angeles, California Ph.D. Student, Department of Computer Science August 2018 - May 2023 (expected) GPA 4.00/4.00

Advised by Gaurav Sukhatme

University of Georgia Athens, Georgia

August 2010 - May 2014

Bachelor of Science, double major in Math and Computer Science

GPA 3.94/4.00

University of Oxford Oxford, England

International Conflict course

May 2011 - June 2011

# Work experience

X (formerly Google X) Mountain View, California

December 2015 - June 2018

Software Engineer, Robotics

Built perception systems for mobile base navigation

Designed and developed sequence learning models for dynamic obstacle prediction and avoidance

## Microsoft Corporation Redmond, Washington

July 2014 - November 2015

Software Development Engineer, Windows 10 Photos

Developed photo viewer application served to millions of customers (C#/C++)

## Awards

Computer Science Outstanding Undergraduate with Distinction University of Georgia. Awarded to the best student in the Computer Science department.

**Foundation Fellowship** The University of Georgia's top academic undergraduate scholarship, providing tuition and living stipends, and conference, travel, and scholastic development grants. (80 Foundation Fellows out of 26,000 undergraduates)

Robert C. Byrd Honors Scholarship Federal four-year merit scholarship for undergraduates.

## Research experience

## Robotics Embedded Systems Lab University of Southern California

August 2018 -

Graduate Research Assistant

# Cognitive Learning for Vision and Robotics Lab University of Southern California August 2018 - Graduate Research Assistant

#### THINC Lab University of Georgia

January 2013 - June 2014

Undergraduate Research Assistant

Implemented a framework using ROS to run multi-agent decision making algorithms on quadrotors. Developed approximation algorithms for Interactive Partially Observable Markov Decision Processes.

#### Schindelhauer Lab University of Freiburg

May 2012 - July 2012

Visitor

Developed and implemented models for sonic localization of robot swarms or mapping applications.

#### Schools Improvement Initiative University of Cape Town

June 2013 - August 2013

Visitor

Collected data on community outreach strategies and technological education curricula.

Repaired hardware, trained teachers, and installed software and wikis at schools with limited resources.

#### Promislow Lab University of Georgia

July 2011 - January 2013

Undergraduate Research Assistant

Developed computational models backing a new hypothesis for post-reproductive organism lifespan.

# Leadership

#### Greyhills Academy Robotics Pilot Tuba City, Navajo Nation, Arizona

April 2018

With another Googler, organized and taught a two day robotics pilot course for students living in the Navajo nation.

Developed a continuing partnership between Google and Greyhills academy, and set the schedule for future collaboration.

### UGA Mathcounts Outreach University of Georgia

President

August 2013 - May 2014

Coordinated board meetings and set organizational direction for a 200+ member student volunteer tutoring organization.

Expanded reach from 8 to 11 middle schools and increased focus on students in need.

Volunteer Coordinator

August 2012 - May 2013

Coordinated 200+ student volunteers at 8 local middle schools, distributing curriculum materials and establishing contact with school administrations.

#### Free IT Athens Athens, Georgia

August 2009 - May 2014

Staff Member

Trained volunteers in building computers and interacting with customers.

Taught classes in basic computer use to low-income Athens residents.