

## Grant Wilde

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ASU Station #10909 | San Angelo, Texas 76909

### EDUCATION

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**Texas A&M University** – College Station, TX *Master of Science, Computer Science*  
GPA – 3.600 on 4.0 scale

**PhD Student** *Expected Graduation: August 2019*

**Master's Thesis** – *Path Plan Performance Evaluation of the Challenge 1: A Small Unmanned Surface Vehicle for Radiation Detection and Mapping* *August 2016*

**Angelo State University** – San Angelo, TX *B.S. Double Major and Computer Science*  
GPA – 3.877 on 4.0 scale *May 2013*

Studied abroad in Scotland, England, France *June 2011*

### HONORS AND AWARDS

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- Nominated as Finalist for Best Paper at SSRR 2015
- Texas A&M Department of Computer Science and Engineering Teaching Assistant Excellence Award for the 2014-2015 School Year
- Angelo State University's College of Arts and Sciences Distinguished Student for the 2012-2013 School Year
- Dean's List; 8 semesters
- Alpha Chi Member; National Honor Society
- Pi Mu Epsilon Member; National Mathematics Honor Society
- Who's Who Among American College Students; Nationally Recognized Student Award
- The Math and CS Department's nomination for the Angelo State Presidential Award
- Carr Academic Scholarship Recipient
- Special Academic Math Department Scholarship Recipient

### ACADEMIC POSITIONS

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**TA for CSCE 420** - TAMU Computer Science and Engineering *Spring 2019- Present*  
Assisted Dr. Walter Daugherty in teaching his under graduate class of Artificial Intelligence. Responsibilities included grading assignments, proctoring exams, and office hours.

**CRASAR Lab Manager** – Center for Robot Assisted Search and Rescue *Fall 2014-Present*  
Responsibilities included status and maintenance of CRASAR robots, gear, and vehicles, and working with Bruce Veals to insure robot inventory.

**TA for CSCE 635** – TAMU Computer Science and Engineering *Fall 2014, Spring 2017*  
Assisted Dr. Robin Murphy in teaching her graduate class of AI Robotics. Responsibilities included creating and grading projects, proctoring exams, and leading group case studies.

**Research Assistant** – *Texas A&M Engineering Experiment Station* Summer 2015-Fall 2018  
Responsibilities included assisting with research grant proposal writing, conducting research pertaining to unmanned marine vehicles and the milestones stated in each grant received, purchasing required materials and hardware needed for the project, working with first responders in the development of the technologies needed to assist them in their day to day operations with robots, and deploying to natural disasters to assist responders in the response and recovery phase. Disasters deployed to are the Memorial Day Floods of 2016 and Hurricane Harvey.

**TA for ENGR 491** – *TAMU Dwight Look College of Engineering* Fall 2014-Spring 2015  
Assisted Dr. Robin Murphy, Dr. Dylan Shell, and Dr. Craig Marianno with one of Texas A&M's Aggie Challenge projects. Responsible for purchasing equipment, creating tutorials, and mentoring research groups.

**TA for CSCE 206** – *TAMU Computer Science and Engineering* Fall 2013-Spring 2014  
Assisted Dr. Joseph Hurley teach non Computer Science majors C++. Responsible for weekly labs, creating assignments, creating and grading tests, and calculating final semester grades.

**Peer Teacher for CAM 1351** – *ASU Math and CS Department* Spring 2012-Spring 2013  
Assisted Dr. Dionne Bailey teach a class in which students learned to use MATLAB, LaTeX, and LyX.

**Computer Science Tutor** – *ASU Math and CS Department* Fall 2010-Spring 2013  
Tutored students in Java, C++, Visual Basic, and Assembly.

## **PROFESSIONAL WORK EXPERIENCE**

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**Farm Hand** – *Wilde Farms* 2009 – Present

**Student Programmer** – *Angelo State Information Technology* June 2010 – June 2013

**Sales Associate** – *Athletic Supply* January 2010 – June 2010

## **WORK RELATED PROGRAMMING PROJECTS**

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- Wrote a self-service application that allows RAs and building managers at ASU to record fire alarm or smoke detector incidents on campus
- Contributed code to Angelo State's study abroad application process
- Contributed code to Angelo State's SMART Trac; software used to track tutoring on campus
- Wrote a self-service application that allows potential transfer students to ASU to see credit transfer equivalency
- Converted IT reports written in WebFOCUS to IBM Cognos 8 Business Intelligence
- Assisted Angelo State University IT DBA Jeff Reils in finding duplicate records and assisted in the transfer/deletion process

## SKILLS

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**Programming Languages:** C++, Java, SQL, PL SQL, HTML, PHP, Ruby, Python, Javascript

**Applications:** Toad for Oracle, WebFOCUS, IBM Cognos 8 Business Intelligence, MS Visual Studio, Eclipse

**Operating Systems:** Unix, Linux, and Windows

## UNIVERSITY ACTIVITIES

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Assisted Dr. Robin Murphy as a mentor for *Aggies Invent* *Fall 2014, Spring 2016*

“Zoo Keeper” of the Center for Robot Assisted Search and Rescue’s Interactive Robot Petting; An exhibit allowing visitors the chance to interact with real-life rescue robots. Events have been held at SXSW, AUVSI, and locally at TAMU. *2015 - Present*

MAA (Mathematical Association of America) Member *Fall 2009 – Spring 2013*

Intramurals *Fall 2009 – Spring 2013*

- Flag Football
- Basketball
- Soccer
- Volleyball

Helped ASU CS Department run the programming portion of the Texas UIL Academics Regional 4A Meet *May 2010*

Assisted ASU Math and CS Department with their Science Day exhibit *February 2011*

## PUBLICATIONS

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G. A. Wilde, R. R. Murphy, D. A. Shell, and C. M. Marianno. A man-packable unmanned surface vehicle for radiation localization and forensics. In 2015 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR), pages 1-6, Oct 2015.

R. Murphy, J. Dufek, T. Sarmiento, G. Wilde, X. Xiao, J. Braun, L. Mullen, R. Smith, S. Allred, J. Adams, A. Wright and J. Gingrich "Two case studies and gaps analysis of flood assessment for emergency management with small unmanned aerial systems," *2016 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR)*, Lausanne, 2016, pp. 54-61.

G. A. Wilde and R. R. Murphy. User Interface for Unmanned Surface Vehicles Used to Rescue Drowning Victims. Submitted to 2018 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR), Aug 2018.

R. T. Schofield, G. A. Wilde and R. R. Murphy. Potential Field Implementation for Move-to-Victim Behavior for a Lifeguard Assistant Unmanned Surface Vehicle. Submitted to 2018 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR), Aug 2018.

## **SUBMITTED JOURNAL ARTICLE**

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Title: A Robotics-Oriented Taxonomy of How Ethologists Characterize the Traversability of Animal Environments

Authors: Grant Wilde and Robin Murphy

Journal: Robotics and Autonomous Systems

Status: Accepted pending minor revisions

## **PRESENTATIONS**

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“Robotics in the Real World”, Invited Lecture, **Wall High School**, Wall, TX, February 20, 2015

“The Mathematics Behind Global Positioning Systems”, Open Department Seminar, **Angelo State University**, San Angelo, TX, 2012

## **POSTERS**

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“Path Plan Performance Evaluation of the Challenge 1: A Small Unmanned Surface Vehicle for Radiation Detection and Mapping” Presented at the International Symposium on Safety, Security, and Rescue Robotics (SSRR) in Lausanne, Switzerland, Fall 2016

“Path Plan Performance Evaluation of the Challenge 1: A Small Unmanned Surface Vehicle for Radiation Detection and Mapping” Presented at the IAP Poster Competition, Spring 2017

“Comparison of Spiral and Boustrophedon Paths for a Nearly Holonomic Unmanned Surface Vehicle” Presented at the TAMU Student Research Week Poster Competition, Spring 2017

## **CRASAR DEPLOYMENTS**

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### **Hurricane Harvey**

*August 2017*

Deployed to Fort Bend County for three days to serve as Data Manager for Unmanned Aerial Vehicle (UAV) flights of the flooded region

## **STUDENTS MENTORED**

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### **Rebecca T. Schofield** – Undergraduate at Texas A&M University

*Spring 2018*

Honor’s Thesis: Potential Fields Navigation of Lifeguard Assistant Robot for Mass Marine Casualty Response

### **Bryan Collegiate High School Robotics Team** – High School Robotics

*Fall 2017*

Volunteered over 20 man hours of time towards the design and development of BCHS’s UIL State Robotics Competition robot

### **Piya Malhan** – High School Student at Michael E. Debakey

*Summer 2017*

Worked/Shadowed in the CRASAR lab; Currently enrolled at the University of Houston studying Computer Science.

## **RELATED COURSEWORK**

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- CSCE 606 - Software Engineering; Grade: A
- CSCE 608 - Database Systems; Grade: A
- CSCE 614 - Comp Architecture; Grade: A
- CSCE 625 – Artificial Intelligence; Grade: B
- CSCE 627 - Theory of Computability; Grade: A
- CSCE 629 - Analysis of Algorithms; Grade: B
- CSCE 635 - AI Robotics; Grade: A
- CSCE 656 – Computers & New Media; Grade: A
- ISEN 630 - Human Operator in a Complex System; Grade: B
- STAT 630 - Overview of Math Statistics; Grade: B
- CS 1361 - Computer Science I; Grade: A
- CS 1362 - Computer Science II; Grade: A
- CS 2305 - Data Structures and Algorithms; Grade: A
- CS 3304 - Comp Org & Programming; Grade: A
- CS 3311 - Data Base Mgt; Grade: A
- CSCE 3352 - Theory of Algorithms; Grade: A
- CS 4301 - Alg Lang & Compilers; Grade: B
- CS 4302 - Operating Systems; Grade: A
- CS 4318 - Artificial Intelligence; Grade: A
- CS 4381 - Web Database Design; Grade: A
- MATH 2305 - Discrete Mathematics I; Grade: A
- MATH 2513 - Calculus I; Grade: B
- MATH 3301 - Linear Algebra; Grade: A
- MATH 3305 - Discrete Mathematics II; Grade: A
- MATH 3315 - Vector Calculus; Grade: A
- MATH 3514 - Calculus II; Grade: B
- MATH 3335 - Differential Equations; Grade: A
- MATH 4351 - Topology; Grade: A
- MATH 4361 - Complex Variables; Grade: A
- PHYS 3444 - Digital Electronics; Grade: A

## **AREAS OF INTEREST**

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- Artificial Intelligence
- Human-Robot Interaction
- Remote Sensing
- Robotics
- Unmanned Marine Vehicles
- Path Planning