# Andrew Dudley

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#### EDUCATION

#### Arizona State University (Ira A. Fulton School of Engineering)

Tempe, AZ

 $\bullet\,$  Master of Science in Computer Science

Expected May 2019

Cumulative GPA: 4.0/4.0

Relevant Coursework: Statistical Machine Learning, Fundamentals of Statistical Learning, Data Mining

• Bachelor of Science in Computer Science Summa Cum Laude, Cumulative GPA: 4.0/4.0 Jan 2014 - May 2017

# EXPERIENCE

#### Yochan Artificial Intelligence Research Laboratory

Arizona State University

Research Assistantship - Supervised by Dr. Subbarao Kambhampati

- Researching Vehicle-to-Vehicle (V2V) planning and communications for augmenting reality enabled smart HUDs to increase situational awareness of drivers. Paper accepted into Virtual, Augmented, and Mixed-Reality for Human-Robot Interaction (VAM-HRI) workshop at HRI 2018.
- Designed interface to collect human feedback on robot task plans using a simulated environment.

### Teaching Assistant

• Artificial Intelligence • Theoretical Computer Science • Principles of Programming Languages

#### Data Mining and Machine Learning Laboratory

Undergraduate Research Aide

Aug 2016 — Dec 2016

• Developed a distributed web scraping tool to mine data from Twitter hyperlinks (Python).

Allstate

Chicago, IL

Application Developer Intern

May 2016 — Aug 2016

- Implemented natural language processing pipeline for chat bot, which included word sense disambiguation and concept mapping.
- Analyzed modern natural language processing solutions (SyntaxNet, NLTK, SpaCy).

#### **Rockwell Automation**

Phoenix, AZ

Information Developer

Jan 2012 — Jul 2013

- Developed software solution to publish product documentation into a modern format.
- Implemented feature requirements for online and print deliverables (JavaScript, VBScript).

#### Projects

# An Investigation of Bounded Misclassification for Operational Security on Deep Neural Networks

• Implemented a neural network framework from scratch and trained models using domain-specific distance metrics in attempt to impose bounds on the misclassification rate of adversarial inputs. Accepted into AAAI 2018 workshop.

# EpiFinder Tagging (Capstone project)

• A biomedical text annotation tool that uses conditional random fields for named entity recognition to automatically tag ontological concepts. (Spring MVC, JavaScript, Java)

#### Allstate Intelligent Virtual Assistant Challenge

Automated chat client developed in Python

- Awarded cash prize and summer internship at Allstate Headquarters in Chicago, IL.
- Chat bot designed to extract data from knowledge base articles and then use that knowledge to automatically assist users with technical issues and account updates.

# SKILLS

Programming: Python, C, C++, C#, Java Web: Django, Spring MVC, JavaScript

Areas of Interest: Reinforcement Learning, Deep Learning, Pattern Recognition