Andrew Dudley

EDUCATION

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

Tempe, AZ

• Master of Science in Computer Science Cumulative GPA: 4.0/4.0 Expected May 2019

• 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
- 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
Application Developer Intern

Chicago, IL 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 help documentation into a modern help viewer format.
- Created various tools for automating departmental and localization processes.
- Implemented feature requirements for online help 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.

EpiFinder Tagging (Capstone)

• 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.
- Pre-processing, tagging, and other NLP features implemented with Natural Language Toolkit.

SKILLS

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

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