

ADAKU UCHENDU

(301)-326-8363 ◇ azu5030@psu.edu

EDUCATION

Pennsylvania State University

PhD in Information Sciences and Technology

Thesis: *Reverse Turing Tests*

State College, Pennsylvania

August 2018 - Present

University of Maryland Baltimore County

B.S, Mathematics | Minor: Statistics

Honors: Cum Laude

Thesis: *Numerical Simulation of Vibrations of Mechanical Structures*

Baltimore, Maryland

August 2014 - May 2018

ACADEMIC ACHIEVEMENTS

McNair Scholar

January 2016 - May 2018

Undergraduate Research Award Scholar

March 2017 - May 2018

Pi Mu Epsilon Mathematics Honors Society

May 2017 - Present

Bunton-Waller Graduate Fellowship

August 2018 - Present

Best Documentation at ATRC internship

August 2019

Best Poster Presentation at ATRC internship

August 2019

TTO Student Travel Scholarship

October 2019

NSF SFS Scholarship

August 2020 - May 2023

SKILLS

Programming: Python, R, Matlab, Java, LaTeX, Maple

Applications: GitHub, GitLab, Tableau

Operating Systems: Linux, Windows, MacOS

PUBLICATIONS

2. **Uchendu, A.**, Cao, J., Wang, Q., Luo, B., & Lee, D. "Characterizing Man-made vs. Machine-made Chatbot Dialogs," *In Conf. on Truth and Trust Online (TTO)*, London, UK, October 2019

1. Shao, J., **Uchendu, A.**, & Lee, D. (2019). "A Reverse Turing Test for Detecting Machine-Made Texts," *In 11th Int'l ACM Web Science Conf. (WebSci)*, Boston, MA, July 2019

RESEARCH EXPERIENCE

Pennsylvania State University

Research project: Reverse Turing Test

State College, Pennsylvania

August 2018 - Present

- Use nuanced NLP techniques to distinguish text-generators (i.e. Machine and Human).
- Worked on long and short texts.
- Generated texts with state-of-the-art Language Models.
- Currently working on other forms of Turing Tests like Authorship Attribution.

Autonomy Technology Research Center, Air Force Research Laboratory

Research Assistant Intern

Virtual

May 2020 - October 2020

- Performed research and experiments in the field of Computer Vision
- Trained Neural Networks on benchmark image datasets

- Built models robust to white-box adversarial attacks
- Attacked models with strong white-box adversarial attacks

Autonomy Technology Research Center, Air Force Research Laboratory **Dayton, Ohio**
Research Assistant Intern *May 2019 - August 2019*

- Performed research and experiments in the field of Computer Vision
- Trained Neural Network on Satellite dataset
- Attacked model with a black-box adversarial attack
- This research is under Distribution Statement C and so details have to be vague.

Federal Reserve Board **Washington, D.C.**
Research Project *May 2017 - August 2018*

- Data preparation on Islamic and Commercial banks data
- Data analysis on data using Excel and R
- Examined financial growth of each bank
- Used correlation, regression and z-score tests to gain insights

University of Maryland Baltimore County **Baltimore, Maryland**
Research Assistant *February 2016 - May 2018*

- Worked on research titled, “*Numerical Simulation of Vibrations of Mechanical Structures*”
- Ultimate goal is to mitigate the effects of earthquake on buildings during earthquakes
- Implemented derivations in Matlab
- Findings were reported as my Senior Thesis

WORK EXPERIENCES

Pennsylvania State University **State College, Pennsylvania**
Graduate Assistantship *January 2019 - May 2019*

- Worked as a Teaching Assistant in a Security and Risk Analysis course.
- Assisted students on the use of Excel and R, graded and held office hours.

HACKATHONS **Maryland**
UMD Bitcamp *April 2017*

- Built a chrome extension named, ProcrastinationStation with a team
- It re-routes its user to the Procrastination-Station website when Facebook is accessed.
- It works by providing a 30 second limit to answer 3 math questions
- The goal is to discourage facebook surfing while doing school work

HackUmbc

- Built an R Shiny dashboard named, Data Visualization.
- The dashboard takes in a csv file and plots a figure based on the selected column.

Math Lab Tutor *September 2015 - May 2018*

- Tutored the following courses: Pre-calculus, calculus I, Calculus II, Calculus III, Linear Algebra, Differential Equations and College Algebra.
- Also, got Certified as a Level II tutor out of 3 level.

Math Learning Assistant (LA) *August 2016 - December 2016*

- Assisted students in Pre-Calculus.
- Held weekly discussion sessions and Office hours.
- Presented the students with a weekly individual quiz and graded it.