Rachael M. Harris

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EDUCATION

Carnegie Mellon University, Heinz College — May 2024
MS Information Security Policy and Management

Carnegie Mellon University, Heinz College — July 2022
(Certificate) Information Technology Summer Security Intensive (IT:SSI)

Allegheny College — May 2023
BS Computer Science, Minors in Political Science and Philosophy — GPA: 3.73 / 4.00

SKILLS

Languages : Python, Java, R
Tools : SQL (PostgreSQL, mySQL), Git, Version Control, Docker, TravisCI, Google Data Analytics (Certified)

Publications

United States Strategic Command Nuclear Deterrence Report — June-July 2022
Carnegie Mellon University, Heinz College — Pittsburgh, PA

- Led a team of five students to conduct innovative research with the U.S. Strategic Command. Efforts contributed to cutting-edge analysis on U.S. deterrence from traditional nuclear warfare and cyberattacks
- Analyzed and presented the findings, specifically: cyberattacks on NC3 systems and their affect on the system's security as it relates to strategic deterrence. Composed recommendations to lessen doubt of vulnerabilities.

EXPERIENCE

Prudential Financial — June 2021 – August 2021
Software Engineer & Data Analytics Intern — Newark, NJ

- Wrote queries to analyze department data in five MongoDB collections to calculate vendor and package turnaround times, leading to a 33% increase in the number of routine checks on the efficiency of benefits package delivery.
- Collaborated with global engineers in Agile environments to create a dashboard for text analysis of social media posts
- Implemented sentiment analysis using Python and Amazon Web Services (Lambda, Comprehend, Kinesis Firehouse, DynamoDB, and Elastic Search), allowing public relations officers to detect changes in public opinion after large business decisions.

Mozilla @ Allegheny College — September 2020 – December 2020
Ethical Technical Leader — Meadville, PA

- Collaborated with Dr. Janyl Jumadinova under Mozilla's Ethics in Computer Science initiative to create a sorting and labeling bot to determine how far false information spreads over social media at a critical time in communication.
- Trained an AI, using scikit-learn and a prepared data set, to detect disinformation and misinformation in tweets and to generate a validity and truthfulness score based on the amount of false information contained within the text.
- Displayed the scores using Naïve Bayes and Linear SVM.
- Leveraged Twitter's API to extract data from tweets, namely text, username, verification status, and location, allowing users to search for tweets using hashtag, keyword, and username.

Awards

Association for Computing Machinery Upsilon Pi Epsilon Scholarship — 2022