

Henry C. Wong

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EDUCATION

M.S. in Computer Science

Missouri University of Science and Technology
GPA: 3.8/4.0
Thesis Topics: AIoT, Machine Learning, Cyber Security

Aug 2020 - May 2021
Rolla, MO

B.S. in Computer Science

Missouri University of Science and Technology
Major GPA: 3.6/4.0 — Cumulative GPA: 3.3/4.0

Aug 2016 - August 2020
Rolla, MO

PUBLICATIONS

Henry Wong, Tie Luo. "Man-in-the-Middle Attacks on MQTT-based IoT Using BERT based Adversarial Message Generation." Twenty-Sixth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 3rd AIoT Workshop, August 2020.

EXPERIENCE

Liberty Mutual

Portsmouth, NH

Data Science/Cyber Security Intern

May 2019 - Aug 2019

- Used Splunk and Python to analyze authentication trends of over 50,000+ accounts to spot irregularities and vulnerabilities in password reset systems
- Saved more than \$3,000,000 in password reset and training resources by developing a password validation web app using haveibeenpwd API and password creation research

Missouri University of Science and Technology

Rolla, MO

Researcher and Teaching Assistant

December 2018 - Present

- Published as first author to ACM KDD 2020 and presented
- Researched topics covering Machine Learning, Cyber Security, and Internet-of-Things (IoT)
- Taught 104 students for a graduate level Introduction to Artificial Intelligence course
- Covered topics such as A* search, minimax, quiescent states, alpha-beta pruning, and monte-carlo tree search

The Boeing Company

St. Louis, MO

Cyber Security Intern

May 2018 - Aug 2018

- Obtained Department of Defense clearance for multi-million dollar projects
- Enforced the NIST Risk Management Framework for Security Inspections to secure and pass every government classified program at Boeing
- Reduced 3-10 hours per inspection by analyzing data on inspection practices

State Farm

Bloomington, IL

Software Engineering Intern

May 2016 - Aug 2017

- Reduced help desk wait time by developing a Machine Learning chat bot for policy inquiries
- Saved 24 hours per week for IT employees by automating Test Environments in JavaScript
- Designed an interactive Cyber Security lab for 100+ children from The Boys and Girls Club
- Created a 2D game promoting State Farm's motorcycle insurance through safe driving
- Cut load time for over 50 tools by 70% by re-engineering Perl/CGI automation tools

PROJECTS

www.MoData.blog

Rolla, MO

Editor-in-Chief/Head of Data Science

Sept 2017 - Present

- Founded a collaborative data blog called MoData.blog with a focus on Data Science
- Built full stack systems from the ground up including websites, servers, and databases
- Generated over 300 views a week through weekly blog posts on topics ranging from Missouri State Salaries to Terrorism Attacks Across the US
- Articles/Topics Written: *A Quick Look into Nobel Prize Laureates*, *Why Miami is 2nd In Terrorist Attacks*, *Professor Pay in the UM System*, *A Look Into Job Listings from Indeed*

What Gets a Paper Published?

Rolla, MO

	Researcher <div> <ul style="list-style-type: none"> Performed statistical analysis on comparing features of published papers in the American Society of Civil Engineering (ASCE) Journal of Construction Engineering and Management. Utilized SAS to perform studies on data gathered Collected data from ASCE websites with Python and BeautifulSoup Link to report: https://github.com/HenryCWong/whatGetsPublished </div>	December 2019
EXTRA-CURRICULARS	Association for Computing Machinery (ACM) Chair/Founder of the Missouri S&T Hackathon <div> <ul style="list-style-type: none"> Organized the first Missouri S&T Hackathon, Shamhacks (later renamed to PickHacks) to grow into the largest hackthon in the state of Missouri Negotiated with every campus official to approve the first large scale hackathon Formed connections with companies with many being first time hackathon sponsors </div>	Rolla, MO Sept 2017 - May 2018
	ACM Cyber Security Special Projects Lead <div> <ul style="list-style-type: none"> Place 26th in worldwide Capture the Flag(CTF) Competitions under the team M57 Planned multiple Cyber Security Bootcamps at Sandia National Laboratory </div>	Rolla, MO Aug 2016 - Jan 2019
SKILLS	Machine Learning: Federated Learning, NLP, Neural Networks, Regression Data Visualization: Matplotlib, Seaborn, Tableau Programming: C/C++, Git, JavaScript, Linux, Python, R, SAS, SQL Libraries: BeautifulSoup, Numpy, Pandas, PyTorch, Scipy, Sklearn, Tensorflow	
AWARDS	Student Registration Award ACM Knowledge and Data Discovery Conference 3rd Place and Employees Choice Award Liberty Mutual Hackathon	Aug 2020 July 2019
CLEARANCES	Secret Level Government Clearance (Department of Defense)	July 2018
CERTIFICATIONS	Deep Learning Specification Certification (deeplearning.ai) Machine Learning Certification (Stanford University)	Aug 2020 Aug 2017
COURSES	Artificial Intelligence — Deep Learning — Statistical Data Analysis — Intro to Data Science — Combinatorics and Graph Theory — IoT with Applied Data Science — Data Mining	