

HANNAH CHEN

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EDUCATION

University of Virginia <i>PhD in Computer Science (GPA: 4.0/4.0)</i>	Charlottesville, VA Aug. 2019 – Present
Chang Gung University <i>BS in Information Management (GPA: 3.53/4.0, Last 60 GPA: 4.0/4.0)</i>	Taoyuan, Taiwan Sep. 2014 – Jun. 2018

WORK EXPERIENCE

Machine Learning Intern <i>Cybersecurity Technology Institute, Institute for Information Industry</i> <ul style="list-style-type: none">• Exploratory data analysis of Tweets from security experts• Built binary classifiers for Secbuzzer System to identify security related Tweets• Built and trained Word2Vec and Doc2Vec models to find similarity between contexts• Built classification pipeline for streaming data stored in Elasticsearch	Jun. 2018 – Dec. 2018 Taipei, Taiwan
Undergraduate Research Assistant <i>Lab of Ubiquitous Security and Applications, Chang Gung University</i> <ul style="list-style-type: none">• Participated in Prof. Chien-Lung Hsu's IoT security research project• Implemented device authentication using NTRU encryption in Java• Programmed Raspberry Pi sensors to capture environmental data	Jul. 2017 – Jun. 2018 Taoyuan, Taiwan

TEACHING ASSISTANT

CS6501 AI for Social Good <i>University of Virginia</i>	Fall 2021
CS6501 Natural Language Processing <i>University of Virginia</i>	Spring 2021
DS5001 Exploratory Text Analytics <i>University of Virginia</i>	Fall 2020
Python Programming <i>Chang Gung University</i>	Spring 2018

AWARDS & HONORS

Student member of IEEE HKN Gamma Pi Chapter at UVA (2021)
UVA Engineering Dean's Scholar Fellowship (2019 – 2024)
Three times Presidential Awards (2016 Fall, 2017 Spring, 2017 Fall; Top 3% of class)
First runner-up of 2014 Chang Gung University English Speech Contest

PUBLICATIONS

Finding Friends and Flipping Frenemies: Automatic Paraphrase Dataset Augmentation Using Graph Theory
Hannah Chen, Yangfeng Ji, David Evans
EMNLP 2020 (Findings), November 2020

Pointwise Paraphrase Appraisal Is Potentially Problematic
Hannah Chen, Yangfeng Ji, David Evans
ACL 2020 Student Research Workshop, July 2020

PROJECTS

- Ensemble Embedding of Information Infusion Model for Threat Intelligence Correlation** Sep. 2018 – Dec. 2018
- Integrated crowdsourcing information to gain further insight into ongoing cyber attacks
 - Correlated Common Vulnerability and Exposures (CVE) with the associated tweet discussions using information retrieval and ensemble learning
 - Developed sec2Vec embedding method. (Github repository: [sec2vec](#))
- Security-Enhanced IoT/Wearable Wireless Sensor Network** Jul. 2017 – Jun. 2018
- Designed new lightweight cryptosystems for IoT devices
 - Improved IEEE 802.15.6 Authentication Association and Block-adding with NTRU
- Health Monitoring and Management System for Elderly Care** Mar. 2017 – Dec. 2018
- Analyzed the elders' health and mental conditions by tracking the data of their activities and emotions
 - Built stroke testing and activity check-in module using facial and speech recognition
 - Built with Node.js, ExpressJS, HTML/CSS, JavaScript, MongoDB, and Face Recognition APIs

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C/C++, R

Web Development: Node.js, ExpressJS, EJS, HTML/CSS

Libraries: numpy, pandas, BeautifulSoup4, scrapy, matplotlib, plotly, gensim, scikit-learn, xgboost, opencv, keras, pytorch