Yang (Henry) Liu

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scholar.google.com/citations?user=Ntt81hsAAAAJ&hl=en&oi=ao | github.com/yliu9418

EDUCATION

North Carolina A&T State University, *Greensboro, NC*
Ph.D. Candidate, CS (GPA: 4.0, *Quantum Information Science and Engineering (QISE) Scholar*)   *Exp. May. 2024*
Research area: Natural Language Processing (NLP), Machine Learning, and Quantum Computing
M.S., CS (GPA: 3.62, *Graduate Research Assistantship Winner*)   *Jul. 2020*
B.S., ECE (GPA: 3.65, *Outstanding Academic Achievement*)   *May. 2018*

TECHNICAL SKILLS

Programming Languages: Python, Qiskit, Java, SQL, HTML/XML
Courses: Operating System, Algorithm Design and Analysis, Machine Learning & Data Mining,
  Data Structure, Network Science, Deep Learning, Data Processing & Visualization, et al.

WORK EXPERIENCE

IBM HBCU Quantum Center   *Jun. 2021 – Present*
Human-Centered AI (*HCAI*) Lab   *Aug. 2018 – Present*
Research on Quantum Computing   *Aug. 2021 – Present*
- Selected as a graduate student scholar by IBM to work in IBM HBCU Quantum Center
- Study the state-of-the-art quantum computing technologies for machine learning and NLP
- Working on a cross-cutting project of quantum machine learning

Research on Machine learning and NLP
- Built a cleaned corpus of COVID-19 pandemic-related posts from 18 location-specific subreddit communities of North Carolina from March through August 2020 using various NLP techniques
- Developed a custom NER system to assess the uptake of mitigation measures against the spread of COVID-19
- Extracted how people's concerns/behaviors changed about the pandemic using an LDA-based topic model and BERT-based sentence clustering

Computer Science Department Teaching Assistant   *Jan. 2020 – Present*
- TA for *COMP161* Python for Data Science, *COMP163* Intro Computer Programming, *COMP360* Programming Languages, *COMP620* Web Security, *COMP841* Deep Learning, and QISE Undergraduate Scholar Program
- Lecture and lead weekly Lab and Q&A sessions to help students understand course materials

National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Program in Data Science
Research Mentor   *Summer 2020 & 21 & 22*
- Involved with the planning and executed the REU program
- Trained students on a variety of topics within the field of APIs, NLP, and machine learning for 3 months
- Guide students to produce an oral presentation, a poster, and a manuscript at the conclusion of the summer program

CERTIFICATIONS

• IBM certified 2022 Qiskit Global Summer School on Quantum Simulation   *Aug. 2022*
• NVIDIA Deep Learning Institute (DLI) certificated Fundamentals of Deep Learning   *Mar. 2022*
• CodePath certificated Intermediate Software Engineering   *Dec. 2021*
• NVIDIA DLI certificated Building Transformer-Based Natural Language Processing Applications   *Apr. 2021*

PUBLICATIONS (The Last Three)

[1] **Liu, Y.**, Yue, Z., & Anwar, M. (2022, November). Monkeypox At-a-glance from Google Trends and Reddit. In 2022 IEEE/ACM international conference on Connected Health: Applications, Systems and Engineering Technologies (*CHASE*). (Accepted)
[2] **Liu, Y.**, & Anwar, M. (2022, September). Learning Programming in Social Media: An NLP-powered Reddit Study. In 2022 *International Conference on Transdisciplinary AI (TransAI)*. IEEE. (Accepted).
[3] **Liu, Y.**, Whitfield, C., Anwar, M., et al. (2021). Monitoring COVID-19 pandemic through the lens of social media using natural language processing and machine learning. *Health Information Science and Systems*, 9(1), 1-16.

PROFESSIONAL ACTIVITIES

• Reviewer for Journal of Medical Internet Research (**JMIR**), **ACM-BCB 2022**, **BDMIP 2022**
• Host for **2022 Triad programming Contest**

VOLUNTEER

• Artist Buddy, North Carolina Folk Festival (NCFF), Greensboro, NC   *Sep. 2019*
• Participated perform *Tai Chi* and achieved the ***Guinness World Record*** for the largest martial arts display   *Oct. 2015*