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EDUCATION

New Jersey Institute of Technology, *Newark, NJ, US*

Ph.D. in Computer Science 09/2018 - 05/2023

- *Dissertation:* **AI Approaches to Understand Human Deceptions, Perceptions, and Perspectives in Social Media**

New Jersey Institute of Technology, *Newark, NJ, US*

M.S. in Computer Science 09/2015 - 05/2017

National Sun Yat-Sen University, *Kaohsiung City, Taiwan*

B.S. in Computer Science and Engineering 09/2010 - 06/2014

EXPERIENCE

St. Francis College, *Brooklyn, New York, NY*

Chair, Department of Computer Science and Cybersecurity 09/2025 - present

- Lead the newly established Department of Computer Science and Cybersecurity, overseeing faculty recruitment, program implementation, and course development.
- Guide departmental initiatives to strengthen AI, machine learning, and cybersecurity education aligned with national STEM and workforce priorities.
- Spearhead interdisciplinary collaborations and external partnerships to expand the College's leadership in computing education.
- Oversee the department's four academic programs (BS Computer Science, MS Computer Science, BS Cybersecurity, and MS Cybersecurity), ensuring program quality, successful implementation, student recruitment, and long-term sustainability.

Assistant Professor of Computer Science 07/2024 - present

- Led the development of the Master of Science in Cybersecurity program, **achieving formal approval from the New York State Education Department in September 2025**, marking the College's first graduate program in the field.
- Directed the creation of the Bachelor of Science in Cybersecurity program, preparing feasibility studies, curriculum maps, and syllabi that **secured NYSED approval in August 2025.**
- Designed and taught courses in AI, data analytics, algorithms, and data structures using project-based, application-driven methods.
- Contributed to the development of graduate-level Computer Science courses, laying the groundwork for the College's inaugural graduate program in the discipline.
- Collaborated across departments to ensure new program proposals aligned with institutional strategy and external accreditation standards.

Computer Science Graduate Course Coordinator 01/2025 - present

- Oversee and coordinate graduate Computer Science curricula, maintaining academic rigor and incorporating emerging technologies to elevate student engagement and program quality.

STEM Faculty Ambassador 10/2024 - present

- Promote STEM education within the college through events and initiatives that highlight technology's role in addressing contemporary issues, increasing student participation and interest in AI applications.

Committee Member, Middle States Working Group (Standard I: Mission and Goals) 01/2025 - present

- Support strategic discussions and revisions of the institution's mission and goals, to accurately reflect the demands of a modern educational landscape and adhere to accreditation standards.

City University of New York – College of Staten Island

Adjunct Assistant Professor 01/2024 – 06/2024

- Led a Python course on Computational Problem Solving, focusing on algorithmic logic, data manipulation, and analytical reasoning; preparing students for advanced roles in data analysis and machine learning.
- Integrated real-world programming challenges to enhance students' understanding of IT and software engineering concepts; crucial for effective data system management.
- Led projects to enhance skills in algorithm design, program efficiency, and modular coding; equipping students for data analysis and problem-solving.

New York Institute of Technology

Adjunct Assistant Professor 09/2023 – 05/2024

- Instructed an interdisciplinary Data Analytics course, that emphasized ethical considerations in data science, including data privacy, bias identification, and responsible usage, aligning with the latest industry standards and societal expectations, while enhancing critical data interpretation and visualization skills.
- Integrated theoretical knowledge with practical exercises to develop critical thinking and statistical analysis skills; preparing students to tackle data challenges across real-world scenarios.
- Supervised group projects involving reliable data acquisition, rigorous statistical analysis, and impactful data visualization; emphasizing the role of data analysis in addressing societal issues and driving societal progress.

New Jersey Institute of Technology

Adjunct Instructor 01/2023 – 05/2023

- Instructed a graduate-level course on database management systems, covering ETL, PL/SQL, XML, JSON, MongoDB, and data warehousing principles; equipping students with advanced data management knowledge.
- Designed interactive labs and demonstrations to deepen students' practical understanding of database technologies and query languages; bridging the gap between theoretical knowledge and real-world application.
- Created project milestones, rubrics, and code reviews to impart critical analytic and development skills; ensuring students are well-prepared for the demands of the tech industry.

Machine Learning Researcher - Doctoral Candidate 09/2021 – 05/2023

- Conducted writing and editing experimental results for publication in journals and conferences; contributing to the advancement of the field.
- Compiled and synthesized research data to observe larger trends and patterns affecting area of study; providing valuable insights into the development of more effective machine learning algorithms.
- Met regularly with research team to identify research issues and support study alignment; fostering a cohesive and productive research environment.

Machine Learning Research Assistant 09/2020 - 05/2022

- Conducted thorough literature reviews to better understand research topics and prepare for studies; contributing to the strategic approach to machine learning challenges.
- Collaborated with research team coworkers to develop robust research strategies; resulting in the successful execution of machine learning projects.
- Gathered, organized, and analyzed research data, creating compelling graphs and charts that effectively highlighted key findings; enhancing the clarity and impact of presentations at academic and industry forums.

Grader 01/2020 - 05/2020

- Partnered with a professor to enhance the database curriculum by incorporating Neo4j cypher query language and knowledge graph visualization; enriching the learning experience and equipping students with cutting-edge skills in data management.
- Assisted with grading assignments and supplying feedback for improvement of student performance; contributing to the overall success and academic growth of students in the course.

Teaching Assistant 09/2019 - 12/2019

- Supported professors in organizing and managing course materials; contributing to a well-structured and positive learning environment in two database courses.
- Conducted grading assignments and tests, and provided constructive feedback for students in database course; facilitating their academic growth and understanding of complex database concepts.

PUBLICATIONS

- **Li, C.,** Chun, S. A., Geller, J. (2025). Perspective-Based Microblog Summarization. *Information*, *16*(4), 285. Journal of Multidisciplinary Digital Publishing Institute. Information (MDPI). https://doi.org/10.3390/info16040285
- **Li, C.**, Chun, S. A., Geller, J. (2024). Enhanced Multi-Class Detection of Fake News. Proceedings of the 37th International Florida Artificial Intelligence Research Society Conference (FLAIRS) https://journals.flvc.org/FLAIRS/article/view/135581 .
- **Li, C.**, Kollapally, N. M., Chun, S., Geller, J. (2024). Fake News Detection and Behavioral Analysis: Case of COVID-19. In Last, M., Litvak, M., & Lin, M. (Eds.), Detecting Online Propaganda and Misinformation. World Scientific. Advance online publication. https://doi.org/10.1142/13556
- Chun, S. A., Yusuf, F., Vasudevan, S., Renda, M., **Li, C.**, Geller, J. (2023). Toward Policy Transparency and Real-Time Policy Assessment. In Proceedings of the 24th Annual International Conference on Digital Government Research (DGO '23). Association for Computing Machinery, New York, NY, USA, 660–662. https://doi.org/10.1145/3598469.3598549
- **Li, C.** (2023). "AI Approaches to Understand Human Deceptions, Perceptions, and Perspectives in Social Media". Dissertations. 1665. https://digitalcommons.njit.edu/dissertations/1665
- **Li, C.**, Chun, S. A., Geller, J. (2023). Multiple View Summarization Framework for Social Media. Proceedings of the 36th International Florida Artificial Intelligence Research Society Conference (FLAIRS). https://doi.org/10.32473/flairs.36.133169
- **Li, C.**, Renda, M., Yusuf, F., Geller, J., Chun, S. A. (2022). Public Health Policy Monitoring through Public Perceptions: A Case of COVID-19 Tweet Analysis. Journal of Multidisciplinary Digital Publishing Institute. Information (MDPI) 2022, 13, 543. https://doi.org/10.3390/info13110543

- **Li, C.,** Chun, S., Geller, J. (2022). Stemming the Tide of Fake News about the COVID-19 Pandemic. Proceedings of the 35th International Florida Artificial Intelligence Research Society Conference (FLAIRS). https://doi.org/10.32473/flairs.v35i.130716
- **Li, C.,** Chun, S., Geller, J. (2021). Knowledge Graph Analysis of Russian Trolls. In Proceedings of the 10th International Conference on Data Science, Technology and Applications, ISBN 978-989-758-521-0, ISSN 2184-285X, pages 335-342. https://doi.org/10.5220/0010605403350342
- Chun, S. A., **Li, C.,** Toliyat, A., Geller, J. (2020). Tracking Citizen's Concerns during COVID-19 Pandemic. In Proceedings of the 21st Annual International Conference on Digital Government Research (DGO '20), Association for Computing Machinery, Seoul, Republic of Korea, 322–323. https://doi.org/10.1145/3396956.3397000

RESEARCH PROJECT EXPERIENCE

Multiple View Summarization Framework using NLP and Machine Learning:

- Developed an NLP-based multiple view summarization framework in Python, achieving a 99% reduction in processing time and delivering extractive summaries of microblogging posts in under 15 seconds; addressing information overload and echo chamber issues.
- Enhanced summarization accuracy by 14% through a unique tri-method approach (Entity, Event, Social Feature) and the integration of user-centric perspectives such as sentiment, time, location, and fake news detection; ensuring relevance and precision in summarization.
- Developed a user-friendly app that provides customized summarizations based on a combined approach and user-specific perspectives, catering to diverse needs and empowering users with informed decision-making tools.

Enhancing Healthcare Policy Making with NLP-Driven Public Sentiment Analysis:

- Built a web application using Python, NLP (sentiment analysis) and MySQL to analyze over 5,000 daily Twitter posts regarding 12 critical COVID-19 policies; providing an innovative and timely method to capture public sentiment and gauge community reactions to policy changes.
- Developed interactive dashboards and maps using Python and Tableau to offer policymakers temporal and geographical insights into citizen concerns and pandemic correlations; facilitating the creation of more targeted and effective healthcare strategies.
- Promoted policy awareness and evidence-based decision making through near real-time NLP based analysis; influencing the adaptation and effectiveness of policies during the COVID-19 crisis.

Deep Learning AI Model Development to Enrich Fake News Detection using BERT:

- Developed AI-driven detection models using Deep Learning, Python, TensorFlow, and BERT to identify and classify COVID-19 related fake news, achieving a 96% accuracy, a 5% increase over existing models; mitigating misinformation spread during critical health crises.
- Enhanced the AI model performance and accuracy by employing ensemble modeling and cross-validation to overcome modeling errors; underscoring a commitment to advancing AI solutions.
- Coordinated the development of a web-based fake news fact checking application; fostering the dissemination of accurate information and bolstering societal resilience against the detrimental effects of fake news.

Knowledge Graph Summarization to Unravel Insights from Russian Troll Tweets during the 2016 US Presidential Election:

- Designed interactive knowledge graphs using Neo4j and Gephi, transforming complex analytical results into accessible and engaging visual narratives; enhancing the interpretability of complex data.

- Revolutionized data interpretation by replacing dense tables with NLP-driven knowledge graph summaries, reducing data interpretation time spent by 50%; accelerating the decision-making process.
- Empowered stakeholders with intuitive dashboards, streamlining decision-making by presenting clear, concise, and summarized insights; facilitating informed and efficient strategic actions.

TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, Cypher (Neo4j Query Language)
- Artificial Intelligence (AI), Machine Learning (ML), and Natural Language Processing (NLP)
  - ❖ **ML Frameworks:** TensorFlow, NLTK, Scikit-learn, NumPy, Pandas, Matplotlib, spaCy
  - ❖ **Core NLP Tasks:** Sentiment Analysis, Knowledge Triple Extraction, Text Summarization, Data Modeling, Data Pipelines
  - ❖ **AI Techniques:** Neural Networks, Deep Learning Models
- **Web Development:** Flask, REST API, HTML, CSS, JavaScript, Docker, Apache
- **Tools and Platforms:** Jupyter Notebook, Google Colab, Tableau, Neo4j, Gephi