

Garrik A. Hoyt

Research Assistant

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EDUCATION	Lehigh University Ph.D., Computer Science, Start Date: January 2024 New York City College of Technology Major: Computer Systems Technology - Software Development Bachelor of Technology, summa cum laude, June 2020	Bethlehem, PA Brooklyn, NY
ARTICLES	<p>[1] T. McAndrew, A. A. Lover, G. Hoyt, and M. S. Majumder (2025). <i>When data disappear: public health pays as US policy strays</i>. The Lancet Digital Health, 100874. https://doi.org/10.1016/j.landig.2025.100874</p> <p>[2] G. Hoyt, C. S. Bakshi, and P. Basu (2025). <i>Integration of an Audiovisual Learning Resource in a Podiatric Medical Infectious Disease Course: Multiple Cohort Pilot Study</i>. JMIR Medical Education, 11:e55206, 2025. https://doi.org/10.2196/55206</p> <p>[3] G. Hoyt, S. Adegboyega, G. Constantouris, and P. Basu (2024). <i>Study of the impact of introducing a multimedia learning tool in podiatric medical courses</i>. J Foot Ankle Res, 17: e12018. https://doi.org/10.1002/jfa2.12018. Editor's Choice.</p> <p>[4] G. Hoyt, E. Bergren, G. String, and T. McAndrew. <i>Beyond Traditional Surveillance: Harnessing Expert Knowledge for Public Health Forecasting</i>. Under Review: American Journal of Public Health.</p> <p>[5] G. Hoyt, N. Chatterjee, F. Battaglia, and P. Basu. <i>Medical Applications of Graph Convolutional Networks Using Electronic Health Records: A Survey</i>. arXiv:2502.09781 [cs.LG], 2025. https://doi.org/10.48550/arXiv.2502.09781. Under review: Journal of Healthcare Management</p> <p>[6] A. Cho, K. Higuchi, G. Hoyt, M. A. Kosinski, and P. Basu. <i>Effect of geographical disparities in the presence of microbial species in diabetic foot infection: A systematic review and meta-analysis</i>. Under review: Journal of American Podiatric Medical Association.</p>	
POSTERS	<p>[7] A. Subedi, G. Hoyt, N. Chatterjee, and T. McAndrew. <i>Fluformer: Adapting Foundational Time-Series Transformers for Influenza Forecasting</i>. Proceedings of the MIDAS Network 2025 Annual Meeting, Nov. 2025. Bethesda, MD</p> <p>[8] G. Hoyt, E. N. Hulland, M. S. Majumder, and T. McAndrew. <i>A data-driven Bayesian approach to seasonal influenza forecasting: Aggregating social signals and epidemiological data</i>. Proceedings of the DIMACS 2024 Workshop on Forecasting, Oct. 2024. Piscataway, NJ. Proceedings of the MIDAS Network 2024 Annual Meeting, Nov. 2024. Silver Spring, MD</p>	
INSTRUCTIONAL & MENTORSHIP EXPERIENCE	Lehigh University Lead Instructor (Spring 2026) <ul style="list-style-type: none">Design and deliver two-day workshop on using LLM-based tools for researchExpecting 50 participants (graduate students, postdocs, and faculty) from the College of Engineering Research Supervisor (Fall 2025) <ul style="list-style-type: none">Supervised two graduate students on research that resulted in a conference poster [7] Lead Instructor (Summer 2025) <ul style="list-style-type: none">Designed and delivered three-day workshop on using LLM-based tools for research15-20 daily participants consisting of Computer Science graduate students and faculty Teaching Assistant (2024 - 2025) <ul style="list-style-type: none">Introduction to Data Science (Summer 2025)	Bethlehem, PA

- Applied Engineering Computer Methods (Spring 2024)
- Applied Engineering Computer Methods (Fall 2024)
- Introduction to Data Science (Summer 2024)
- Introduction to Data Science (Spring 2024)

- Guided student to acceptance in Lehigh's Catastrophe Modeling Master's program

Undergraduate Research Supervisor (Spring 2025)

- Supervised an undergraduate student at Plaksha University on a one-semester research project

Mountaintop Guide (Summer 2024)

- Guided teams in summer research projects.

RESEARCH EXPERIENCE

Lehigh University

Bethlehem, PA

Research Assistant (2024 - present)

- Investigate seasonal influenza forecasting [1] [4] [7] [8].

Touro University

New York, NY

Data Scientist (2023-2024)

- Investigated the impact of educational technology resources on learning outcomes [2][3].
- Performed all phases of the CRISP-DM process.

PROFESSIONAL EXPERIENCE

Touro University

New York, NY

Developer (2022-2024)

- Developed and maintained ETL solutions and automated workflows.
- Conducted data analysis and visualization.
- Ensured compliance with data privacy and security regulations.

New York College of Podiatric Medicine & Foot Clinic of New York

IT Project Manager & Support Specialist (2019-2022)

New York, NY

- Designed, planned, and executed deployment of a 150-device VoIP system for the college and clinic.
- Managed the migration of the Student Information System and Learning Management System.
- Led the Student Services staff through a successful transition to remote work.
- Conducted thorough data validation and analysis to ensure data accuracy and consistency.
- Managed process automation development.
- Developed an automated digital insurance verification application.
- Developed automated workflows for employee onboarding, key requests, and student separation.
- Created flowcharts and swim lane diagrams to communicate workflows to nontechnical stakeholders.

SERVICE

Reviewed submissions for CIKM (2024)

AWARDS

Dean's List, New York City College of Technology

2017, 2018, 2019, 2020

Journal of Foot and Ankle Research Editor's Choice [3]

2024

SKILLS

Programming: R, Python, C#, Java

Databases: MS SQL Server, MySQL, MongoDB, Oracle DB

Machine Learning: Transformers, Keras, TensorFlow, SKLearn

Applications: Visual Studio/VS Code, R Studio, Jupyter, Docker, MATLAB, Tableau, Eclipse, GRETL

OTHER

English: Native language

Spanish: Intermediate listener, intermediate reader and writer, novice speaker

Citizenship: USA