Garrik A. Hoyt

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EDUCATION
Lehigh University   Bethlehem, PA
Ph.D., Computer Science, Start Date: January 2024

New York City College of Technology   Brooklyn, NY
Major: Computer Systems Technology - Software Development
Bachelor of Technology, summa cum laude, June 2020

JOURNAL ARTICLES
[1] G. Hoyt, S. Adegboyega, G. Constantouris, and P. Basu. (2024). **Study of the impact of introducing a multimedia learning tool in podiatric medical courses**. *J Foot Ankle Res*, 17: e12018. https://doi.org/10.1002/jfa2.12018. *Editor's Choice*.

JOURNAL ARTICLES IN REVIEW
[2] G. Hoyt, C. Bakshi, and P. Basu. **Effect of integration of audio-visual learning resources in a pre-clinical infectious disease course**. Submitted to: *Journal of Medical Internet Research*. https://doi.org/10.2196/preprints.55206

[3] A. Cho, K. Higuchi, G.A. Hoyt, M.A. Kosinski, and P. Basu. **Effect of geographical disparities in the presence of microbial species in diabetic foot infection: A systematic review and meta-analysis**. In preparation: *Journal of American Podiatric Medical Association*.

CONFERENCE POSTERS (ABSTRACT-REVIEWED)
[4] A. Cho, K. Higuchi, G.A. Hoyt, M.A. Kosinski, and P. Basu. **Improvement of therapeutic guidance using geographical diversity of organisms causing diabetic foot infections and associated antibiotic resistance patterns in the United States**. *Proceedings of Northeast Association of Clinical Microbiology and Infectious Diseases 2023 Annual Meeting*, Sept. 2023. Lowell, MA.

[5] K. Higuchi, A. Cho, G.A. Hoyt, M.A. Kosinski, and P. Basu. **Effect of geographical disparities in the presence of microbial species in diabetic foot infection: A meta-analysis**. Abstract VP3, *Proceedings of Diabetic Foot Conference 2023 Annual Conference of the American Limb Preservation Society*, Sept. 2023. Anaheim, CA.

[6] G. Hoyt, E.N. Hulland, M.S. Majumder, and T. McAndrew. **A data-driven Bayesian approach to seasonal influenza forecasting: Aggregating social signals and epidemiological data**. *Proceedings of the DIMACS 2024 Workshop on Forecasting*, Oct. 2024. Piscataway, NJ.

[7] G. Hoyt, E.N. Hulland, M.S. Majumder, and T. McAndrew. **A data-driven Bayesian approach to seasonal influenza forecasting: Aggregating social signals and epidemiological data**. *Proceedings of the MIDAS Network 2024 Annual Meeting*, Nov. 2024. Silver Spring, MD

[8] G. Hoyt, N. Chatterjee. **Medical Applications of Graph Convolutional Networks Using Electronic Health Records: A Survey**. *Proceedings of the 39th Indian Engineering Congress*, Dec. 2024. Kolkata, India

EXPERIENCE
Lehigh University   Bethlehem, PA
Teaching Assistant (2024 - present)
- Undergraduate course in applied engineering methods (Fall 2024)
- Graduate data science course (Summer 2024)
- Undergraduate data science course (Spring 2024)

Research Assistant (2024 - present)   Bethlehem, PA
- Investigate seasonal influenza forecasting with social signal data [6]

Mountantop Guide (Summer 2024)   Bethlehem, PA
- Guided teams in summer research projects.

Touro University   New York, NY
Data Scientist (2023-2024)
- Investigated the impact of educational technology resources on learning outcomes [1][2]
- Performed all phases of the CRISP-DM process

Developer (2022-2024)   New York, NY
- Developed and maintained ETL solutions and automated workflows to support data collection, processing, and reporting.
- Collaborated with cross-functional teams to identify data requirements and ensure data accuracy.
- Conducted data analysis and visualization to support performance monitoring and identify opportunities for process improvements.
- 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 the implementation of a 150-device VoIP system for the college and clinic.
- Managed the migration of the Student Information System and Learning Management System to new platforms, resulting in on-time and within-budget completion.
- Led the Student Services staff through a successful transition to remote work. Provided guidance and support to team members to ensure timely completion of project deliverables, maintaining high levels of productivity and team morale.
- Conducted thorough data validation and analysis to ensure data accuracy and consistency.
- Managed process automation development. Presented findings to stakeholders and provided recommendations for process improvements.
- Developed an automated digital insurance verification application, saving over 500 pieces of paper in the first month of deployment while ensuring data accuracy and consistency.
- Developed Power Automate workflows for employee onboarding, employee key requests, and the student separation process.
- Created flowcharts and swim lane diagrams to communicate workflows to nontechnical stakeholders.
- Provided ongoing technical support to ensure high-quality service delivery and reliability.

AWARDS   **Dean's List**, New York City College of Technology   2017, 2018, 2019, 2020
                Journal of Foot and Ankle Research Editor's Choice [1]

SKILLS   **Data Analysis:** Biostatistics, meta-analysis, inferential and predictive analysis, data visualization and reporting, feature engineering, CRISP-DM, study design

                Programming: R, Python, C/C++, Java

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

                Machine Learning: Keras, TensorFlow, SKLearn

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

LANGUAGES   **English:** Native language

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

OTHER   **Hobbies & Interests:** Cycling, poetry, reading, basketball

                Citizenship: USA