

MIRIAM ASARE-BAIDEN
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EDUCATION

Emory University, Atlanta, Georgia PhD in Computer Science and Informatics Research Focus: AI for Healthcare, Computer Vision, Deep Learning	2022-Present
MEng in Computer Science University of Electronic Science and Technology, Chengdu, China Thesis: Improving Recommendation Diversity via List Aggregation	2017-2019
BSc in Computer Science Kwame Nkrumah University of Science and Technology, Kumasi	2012-2016

WORK EXPERIENCE

Emory University Graduate Teaching and Research Assistant (Introduction to Computer Science, Discrete Mathematics) • Led tutorials for Introduction to Computer Science and Discrete Mathematics. • Mentored students on projects and assignments. • Graded assignments and provided personalized assistance to improve student performance. • Conducted research in AI-driven healthcare applications.	2022-2025
ByteDance (LetsChat) – Remote, Hong Kong Country Technology Consultant (Ghana) • Provided AI consultation for chat applications, increasing platform activity by 15%. • Conducted market research and contributed to localization strategies. • Performed app testing and managed quality assurance processes. • Built a user base in Ghana through strategic marketing campaigns. • Organized online and in-person events to drive community adoption.	2021-2022
Kwame Nkrumah University of Science & Technology – Kumasi, Ghana Teaching Assistant (Database Systems, Introduction to Computers) • Led tutorials and one-on-one sessions for Database Systems and Introduction to Computers. • Mentored students on projects and research. • Assisted in grading, office hours, and course content refinement. • Developed learning materials to simplify complex concepts.	2016-2017
Lasting Dignity Consortium – Accra, Ghana Database Administrator (Intern) • Analyzed data to generate insights and support business decision-making. • Managed and optimized SQL databases, including updating records, running queries, and improving data integrity. • Assisted in database troubleshooting and performance optimization. • Ensured data security and consistency through regular maintenance and backups.	2013

SCHOLARLY WORKS

- Asare-Baiden M., Jordan K., Chung A., Sonenblum S.E., Ho J.C. (2024). Is thermography a viable solution for detecting pressure injuries in dark skin patients? arXiv preprint arXiv:2411.10627.
- Asare-Baiden M., Sonenblum S.E., Jordan K., Chung A., Gichoya J.W., Hertzberg V.S., Ho J.C. (2024). A Feasibility Study of Thermography for Detecting Pressure Injuries Across Diverse Skin Tones. medRxiv.
- M. Asare-Baiden, Vivian Zhang, Vicki Stover Hertzberg, Joyce C. Ho "Beyond Random Splitting: Evaluating the Impact of Data Partitioning Strategies on Ventilator-Associated Pneumonia Prediction Using Electronic Health Records" AMIA Annual Symposium Proceedings, 2025.
- Sonenblum SE, Jordan K, John GT, Chung A, Asare-Baiden M, Pelkmans J, Gichoya JW, Hertzberg VS, Ho JC. Impact of skin tone, environmental, and technical factors on thermal imaging. Plos one. 2025 Sep 10;20(9):e0325091.
- Jordan K, John GT, Chung A, Asare-Baiden M, Hertzberg VS, Ho JC, Sonenblum SE. Impact of skin tone and cupping on erythema and thermal imaging measurements. Scientific Reports. 2025 Nov 27. Jordan K, John GT, Chung A, Asare-Baiden M, Hertzberg VS, Ho JC, Sonenblum SE. Impact of skin tone and cupping on erythema and thermal imaging measurements. Scientific Reports. 2025 Nov 27.

RESEARCH PRESENTATIONS

Poster

- A Feasibility Study of Thermography for Detecting Pressure Injuries Across Diverse Skin Tones, Machine Learning for Health 2024, Vancouver

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, Visual Basic
- **Machine Learning & AI:** PyTorch, Scikit-learn, SciPy
- **Databases:** SQL
- **Data Analysis and Visualization:** NumPy, Pandas, Matplotlib, Seaborn,
- **Other Tools:** Microsoft Office Suite, Git, LaTeX