

# Anna N. Baglione

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## EDUCATION

- 2022 (Expected)      **PhD in Systems Engineering**, University of Virginia
- 2018                    **M.S. in Informatics**, Indiana University
- 2016                    **B.S. in Computer Science and Engineering**, The Ohio State University  
*Cum Laude, With Honors in Engineering*

## RESEARCH EXPERIENCE

- 2018 - Present      **Graduate Researcher**, *Link Lab & Sensing Systems for Health Lab*, University of Virginia  
Supervisor:      Laura Barnes, PhD  
Focus Areas:    mHealth, digital phenotyping, user engagement
- 2016 - 2018        **Graduate Researcher**, Proactive Health Informatics Lab, Indiana University  
Supervisors:    Patrick C. Shih, PhD and James Clawson, PhD  
Focus Area:      Grieving in the digital age; Designing for music therapists
- 2015                    **Undergraduate Researcher**, The Ohio State University  
Supervisor:      Johanna C. Devaney, PhD  
Focus Area:      Music information retrieval
- 2015                    **NSF REU Intern**, *Center for Computation and Technology*, Louisiana State University  
Supervisors:    Stephen David Beck, PhD and Christopher Branton, PhD  
Focus Area:      Digital laptop orchestras; Internet of Things
- 2013                    **NSF REU Intern**, *Virtual Reality Applications Center*, Iowa State University  
Supervisor:      Stephen Gilbert, PhD  
Focus Area:      Intelligent tutoring systems for engineering equations

## PUBLICATIONS

- 2021    **A. N. Baglione**, M. P. Clemens, J. F. Maestre, A. Min, L. Dahl, and P. C. Shih, "Understanding the Technological Practices and Needs of Music Therapists," Proc. ACM Hum.-Comput. Interact., vol. 5, no. CSCW1, Apr. 2021, doi: 10.1145/3449107.
- J. F. Maestre, P. Zdziarska, A. Min, **A. N. Baglione**, C.-F. Chung, and P. C. Shih, "Not Another Medication Adherence App: Critical Reflections on Addressing Public HIV-related Stigma Through Design," Proc. ACM Hum.-Comput. Interact., vol. 4, no. CSCW3, p. 262:1-262:28, Jan. 2021, doi: 10.1145/3434171.
- 2020    S. Mendu, **A. Baglione**, S. Bae, C. Wu, B. Ng, A. Shaked, G. Clore, M. Boukhechba, and L. Barnes, "A Framework for Understanding the Relationship between Social Media Discourse and Mental Health," Proc. ACM Hum.-Comput. Interact., vol. 4, no. CSCW2, p. 144:1-144:23, Oct. 2020, doi: 10.1145/3415215.
- A. N. Baglione**, J. Gong, M. Boukhechba, K. J. Wells, and L. E. Barnes, "Leveraging Mobile Sensing to Understand and Develop Intervention Strategies to Improve Medication Adherence," IEEE Pervasive Computing, vol. 19, no. 3, pp. 24–36, Jul. 2020, doi: 10.1109/MPRV.2020.2993993.

- 2020 M. Boukhechba, **A. N. Baglione**, and L. E. Barnes, "Leveraging Mobile Sensing and Machine Learning for Personalized Mental Health Care," *Ergonomics in Design*, vol. 28, no. 4, pp. 18–23, May 2020, doi: 10.1177/1064804620920494.
- S. Mendu, **A. Baglione**, S. Bae, and L. Barnes, "Redesigning the Quantified Self Ecosystem with Mental Health in Mind," in *CHI 2020 Workshop on Technology Ecosystems: Rethinking Resources for Mental Health*, 2020, p. 5.
- S. Bae, M. Rucker, **A. Baglione**, M. K. Ameko, and L. Barnes, "A Framework for Addressing the Risks and Opportunities In AI-Supported Virtual Health Coaches," in *Proceedings of the 14th EAI International Conference on Pervasive Computing Technologies for Healthcare*, New York, NY, USA, 2020, pp. 251–254. doi: 10.1145/3421937.3421971.
- 2019 S. Mendu, M. Boukhechba, **A. Baglione**, S. Bae, C. Wu, and L. Barnes, "SocialText: A Framework for Understanding the Relationship Between Digital Communication Patterns and Mental Health," in *2019 IEEE 13th International Conference on Semantic Computing (ICSC)*, Newport Beach, CA, USA, 2019, pp. 428–433, doi: 10.1109/ICOSC.2019.8665567.
- 2018 **A. N. Baglione**, M. M. Girard, M. Price, J. Clawson, and P. C. Shih, "Modern Bereavement: A Model for Complicated Grief in the Digital Age," in *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems - CHI '18*, Montreal QC, Canada, 2018, pp. 1–12, doi: 10.1145/3173574.3173990.
- 2017 S. Natarajan, A. Prabhakar, N. Ramanan, **A. Baglione**, K. Siek, and K. Connelly, "Boosting for Postpartum Depression Prediction," in *2017 IEEE/ACM International Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE)*, Philadelphia, PA, USA, 2017, pp. 232–240, doi: 10.1109/CHASE.2017.82..

#### MANUSCRIPTS ACCEPTED FOR PUBLICATION

K. Daniel, S. Mendu, L. Cai, **A. Baglione**, M. Boukhechba, L. Barnes, and B. Teachman, "Cognitive Bias Modification for Threat Interpretations: Using Passive Mobile Sensing to Detect Intervention Effects in Daily Life." (In Press). *Anxiety, Stress, & Coping*.

#### MANUSCRIPTS UNDER REVIEW

**A. N. Baglione**, L. Cai, A. Bahrini, I. Posey, M. Boukhechba, and P. Chow, "Understanding the Relationship between Mood Symptoms and Mobile App Engagement Among Breast Cancer Patients: A Machine Learning Process." Manuscript submitted for publication.

#### PRESENTATIONS / SYMPOSIA

- 2017 **A. Baglione**, M. M. Girard, M. Price, J. Clawson, & P.C. Shih. "Mobile Technologies for Grief Support: Prototyping an Application to Support the Bereaved", Poster presented at the Workshop on Interactive Systems in Healthcare (WISH), Washington, D.C., USA, 2017.
- 2016 **A. Baglione**, C. Branton, & S.D. Beck, "OOT Client-Server Implementation: First Steps in the Orchestra of Things," Paper presented at the SEAMUS National Conference, Statesboro, GA, USA, 2016.
- 2015 **A. Baglione**, C. Branton, & S.D. Beck, "Many Devices, One Orchestra: An Internet of Things Approach to Collaborative Digital Music," Poster Presented at the Council on Undergraduate Research (CUR) Symposium, Arlington, VA, USA, 2015.

## FELLOWSHIPS / GRANTS

2020 - 2021 *NIH Biomedical Data Sciences Training Fellowship*; \$23,000

2018 - Present *Peter and Crisler Quick Fellowship*, Jefferson Scholars Foundation at UVA; \$10,000 / year

## PROFESSIONAL ACTIVITIES AND SERVICE

2020 - 2021 ***Outreach Chair***, Graduate Engineering Student Council (GESC), University of Virginia

2019 - 2020 ***Mental Health Subcommittee Co-Leader***, Graduate Engineering Student Council (GESC), University of Virginia

2018, 2019 ***Link Lab Student Representative*** at Grace Hopper National Conference, University of Virginia

2017 - 2018 ***Treasurer***, Graduate Informatics Student Organization (GISA), Indiana University

2017 ***Graduate Student Mentor***, Proactive Health Informatics REU, Indiana University

2016 - 2017 ***Student Volunteer Coordinator***, School of Informatics, Computing, and Engineering (SICE) Prospective PhD Student Visit Weekend, Indiana University

## PROFESSIONAL AFFILIATIONS / MEMBERSHIPS

2018 - Present **Jefferson Scholars Foundation** at the University of Virginia

2016 - Present **Upsilon Pi Epsilon** International Honor Society for the Computing and Information Disciplines

## PROGRAMMING SKILLS

Python, R, HTML/CSS/JavaScript, SQL

## RELEVANT COURSEWORK

- ***Statistical Modeling***: Probability and Stochastic Processes; Evidence Informed Systems Engineering
- ***Machine Learning***: Data Mining; Applied Machine Learning
- ***Public Health***: Epidemiologic Methods for Outcomes Research
- ***Human-Computer Interaction***: HCI Design Theory (taught by Erik Stolterman); HCI Seminar (taught by Jeffrey Bardzell); Human-Centered Research Methods; Mobile and Pervasive Design; Field Deployments
- ***Natural Language Processing***: Text Mining