

Strengths

- Extensive background in NLP and HCI, contributes to deep understanding of “experience”: both how to measure it and how to express it
- Utilized very large datasets to study fine-grained phenomenon and gain better insight into cognition and interactions
- Leading a comprehensive research program focusing on predicting interaction quality in emotional dialogues, based on how a user produces their response, and visualizing response patterns to improve collaboration
- Apply findings from experiments to make experiences such as remote healthcare and customer service more universally beneficial
- Design compelling visualizations to communicate complex findings to a diverse audience

Education

2016 PhD Candidate, Northwestern University, Human-Computer Interaction

- **Thesis:** [Predicting social dynamics in online dialogue using keystroke and typing behavior \[in progress\]](#)
- **Honors:** Data Science Fellow, Cognitive Science Specialist

2016

MA, CUNY Graduate Center, Computational Linguistics

2013

- **Thesis:** [Utilizing Linguistic Context To Improve Typed Text Identification](#)
- Coursework in Natural Language Processing, Statistics, Data Visualization.

2007

BA, Columbia University, Religion

2003

- **Honors:** King’s Crown Award For Leadership, Dean’s List: 2006, 2007

Experience

2016 Northwestern University, PhD Researcher

- Create machine learning and regression models to understand the influence of social dynamics on user behavior
- Develop quantitative metrics to measure language timing and infer how it reflects experiences and motivations
- Utilize qualitative methodologies to evaluate survey data about experiences during conversations
- Visualize data and results in order to make hypotheses understandable and compelling

2017 Northwestern University, Teaching Assistant

- Teaching experience in Human-Computer Interaction, Cognitive Science, and Sociolinguistics
- Lead discussion sections and provided feedback to students on assignments, and help them understand difficult concepts

2013

Microsoft, Software Developer in Test Intern

- Developed website (back- and front-end) to diagnose licensing issues with Microsoft products

2012
2008

Goldman Sachs & Co., Operations Analyst

- Team Leader for Technology Enhancements
- Created software to streamline daily asset delivery workflow, from 3 hours to 25 minutes

Language Skills

Computer: Python, R (ggplot2, plotly, lme4), Java, C++, L^AT_EX, HTML, JavaScript, React, CSS

Human: Beginning proficiency in American Sign Language (ASL), Hebrew, Latin

Select Awards and Honors

2022 • **Future of Health & Wellness Technologies Conference (HCIC) - Departmental Representative**, Northwestern University

2022 • **Dissertation Research Support**, Northwestern Dept. of Communication Studies

2021 • **Incubation Prize**, Hack4Rare Rare Disease Hackathon

2018 • **Best Paper Award**, Cognitive Modeling & Computational Linguistics Workshop

2016 • **Data Science Fellowship**, Northwestern University

2014 • **Google Lime Connect Scholarship-Finalist**

Selected Publications (See [Google Scholar](#) for full list)

2022 • **Goodkind, A., Gergle, D.** Information from keystroke patterns can increase the effectiveness of digital mental healthcare. Inaugural Meeting of the Society for Digital Mental Health. [[poster](#)]

2021 • **Goodkind, A.** TypeShift: A User Interface for Visualizing the Typing Production Process. [[paper](#)]

Goodkind, A., Bicknell, K. Local word statistics affect reading times independently of surprisal. [[paper](#)]

2018 • **Goodkind, A. & Bicknell, K.** Predictive power of word surprisal for reading times is a linear function of language model quality. In *Proceedings of the 8th Workshop on Cognitive Modeling and Computational Linguistics (CMCL 2018)*. Salt Lake City, UT: Linguistic Society of America. [[paper](#)] [[slides](#)] * **Best Paper Award**

Goodkind, A., Lee, M., Martin, G. E., Losh, M., & Bicknell, K. Detecting language impairments in autism: A computational analysis of semi-structured conversations with vector semantics. In *Proceedings of the Inaugural Meeting of the Society for Computation in Linguistics*. Salt Lake City, UT: Linguistic Society of America. [[paper](#)] [[slides](#)]

2015 • **Goodkind, A., Brizan D.G. & Rosenberg, A.** Improvements to Keystroke-Based Authentication By Adding Linguistic Context. 7th IEEE Conference on Biometrics: Theory, Applications and Systems (BTAS 2015) [[paper](#)]

Brizan, D. G.*, **Goodkind, A.***, Koch, P., Balagani, K., Phoha, V. V., & Rosenberg, A. Utilizing Linguistically-Enhanced Keystroke Dynamics to Predict Typist Cognition and Demographics. *International Journal of Human-Computer Studies*, October 2015, vol. 84, 57-68. [[paper](#)]