

Adam N. Goodkind

CONTACT INFORMATION	Department of Linguistics Northwestern University 2016 Sheridan Rd, Evanston, IL 60208 USA	a.goodkind@u.northwestern.edu http://sites.northwestern.edu/adam/
RESEARCH INTERESTS	Information theory in linguistics, especially as it relates to understanding bias, language production, communication ease, and cognition. Recent work has used vector semantics for understanding autism, and measuring linguistic predictability via eye-tracking and computer typing production. Findings have relied on natural language processing, machine learning and statistical modeling.	
EDUCATION	Ph.D., Linguistics , Northwestern University, Evanston, IL, USA 2016–Present Data Science Fellowship	
	M.A., Computational Linguistics , CUNY Graduate Center, New York, NY, USA 2016 M.A. Thesis: Utilizing Linguistic Context To Improve Identification in Typed Text Thesis Advisors: Prof. Andrew Rosenberg and Prof. Martin Chodorow	
	B.A., Religion: Science & Religion , Columbia University, New York, NY, USA 2007	
RESEARCH EXPERIENCE	Research Assistant , LangComp Lab, Evanston, IL, USA 2017–Present PI: Klinton Bicknell Researching autism diagnoses using linguistic markers, such as semantic similarity (word vectors) and pragmatic deficiencies. Also researching how linguistic predictability affects sentence processing via eye-tracking.	
	Research Assistant , CUNY Speech Lab, New York, NY, USA 2012–2016 PI: Andrew Rosenberg	
	Research Assistant , Columbia NLP Group, New York, NY, USA 2006–2007 PI: Rebecca Passonneau	
HONORS AND AWARDS	Best Paper Award , Cognitive Modeling & Computational Linguistics (CMCL) 2018 Developmental Sciences Cluster Fellowship - Finalist , Northwestern University 2018 Data Science Fellowship , Northwestern University 2016–2017 USS Donald and Mary Ellen Passantino Scholarship , CUNY Graduate Center 2015 Google Lime Connect Scholarship-Finalist 2014 Thomas W. Smith Academic Fellowship , CUNY Graduate Center 2013–2014 National Science Foundation, Undergraduate Research Grant , Columbia University 2007 Albert A. List Academic Fellowship 2003–2007 King’s Crown Award for Outstanding Leadership , Columbia University 2006	
PUBLICATIONS	2018 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 <i>Proceedings of the Inaugural Meeting of the Society for Computation in Linguistics</i> . Salt Lake City, UT: Linguistic Society of America. [paper] [slides] Goodkind, A. & Bicknell, K. Predictive power of word surprisal for reading times is a linear function of language model quality. In <i>Proceedings of the 8th Workshop on Cognitive Modeling and Computational Linguistics (CMCL 2018)</i> . Salt Lake City, UT: Linguistic Society of America. [paper] [slides]	

- 2016 **Goodkind, A.**, Brizan D.G. & Rosenberg, A. *Utilizing Overt and Latent Linguistic Structure to Improve Keystroke-Based Authentication*. **Image and Vision Computing: Best of Biometrics Special Issue**.
- 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)**. (Slides)
- Goodkind, A.** & Rosenberg, A. *Muddying The Multiword Expression Waters: How Cognitive Demand Affects Multiword Expression Production*. **11th Workshop on Multiword Expressions at NAACL-HLT 2015**. (Slides)
- 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**.
- 2014 Locklear, H., Govindarajan, S., Sitova, Z., **Goodkind, A.**, Brizan, D., Rosenberg, A., Phoha, V., Gasti, P., & Balagani, K. *Continuous Authentication with Cognition-centric Text Production and Revision Features*. **Biometrics (IJCB), 2014 IEEE International Joint Conference**.
- 2013 Serwadda, A., Balagani, K., Wang, Z., Koch, P., Govindarajan, S., Pokala, R., **Goodkind, A.**, Brizan, D.G., Rosenberg, A., & Phoha, V. *Scan-based Evaluation of Continuous Keystroke Authentication Systems*. **IT Professional, 15(4), 20-23**.
- 2008 **Goodkind, A.** *Tracking the Emergence of Narrative Competence in Story Retelling*. **Quebec Student Journal of Linguistics, Vol. 3**.
- 2007 Passonneau, R. J., **Goodkind, A.**, & Levy, E. T. *Annotation of Children's Oral Narrations: Modeling Emergent Narrative Skills for Computational Applications*. **Florida Artificial Intelligence Research Society (FLAIRS), 253-258**.
- 2006 Passonneau, R., McKeown, K., Sigelman, S., & **Goodkind, A.**. *Applying the Pyramid Method in the 2006 Document Understanding Conference*. **Proceedings of the 2006 Workshop of the Document Understanding Conference (DUC)**.
- PRESENTATIONS
- 2018 Lee, M.A., Martin, G.E., **Goodkind, A.**, Bicknell, K., Maltman, N., Bush, L., Losh, M. *A Multi-Method Approach to Characterizing Pragmatic Language Development in Individuals with FXS*. Paper presented at the International Fragile X Conference, Cincinnati, OH, July, 2018
- Goodkind, A.**. *Complex Data Visualization: Visualizing language production dynamics via keystroke analysis*. Presentation at Inaugural Data Science Research Day, Northwestern University Institute on Complex Systems, 25 June 2018. (Slides)
- Goodkind, A.**. *Demo of TypeShift software system for tracking keystroke dynamics* at Individual Differences Workshop, Northwestern University, 30 May 2018. (Code)
- Lee, M.A., Martin, G.E., **Goodkind, A.**, Bicknell, K., Maltman, N., Bush, L., Losh, M. *A longitudinal, multi-method analysis of pragmatic language in ASD and related developmental disabilities*. Poster presented at the International Society for Autism Research, May, 2018, Rotterdam, Netherlands
- Goodkind, A.** & Bicknell, K.. *Low-level language statistics affect reading times independently of surprisal*. Poster presentation at the 31st annual CUNY Conference on Human Sentence Processing, UC Davis, Davis, California, 1517 March 2018.
- 2015 Goldman, N. & **Goodkind, A.**. *Worth 1,☺☺☺ Words: The Linguistics of Emoji and Emoji of Linguistics*. SQUID X: 10th Annual Conference Showcasing Quirky and Original Ideas in Development. New York, NY April 24, 2015. (Slides)
- 2014 **Goodkind, A.**. *Detecting Multi-word Expressions Through Typing Patterns*. **15th Texas Linguistics Society Conference, Austin ,TX, October 24-26, 2014** (Slides)
- Goodkind, A.**. *Detecting Multi-word Expressions in Computer Keyboard Produced Text*. **CUNY Research Day**, New York, NY

TEACHING EXPERIENCE	Teaching Assistant Linguistics 220: Language and Society (Prof. Annette D'Onofrio) Northwestern University, Fall 2018 - Guest lecture on quantitative data analysis	
NON-ACADEMIC EMPLOYMENT	Language Engineering Intern , Transcendent Endeavors, NY, NY, USA Software Developer in Test Intern , Microsoft, Redmond, WA, USA Operations Analyst , Goldman Sachs, USA	Summer 2016 Summer 2013 2008–2011
DEPARTMENTAL SERVICE	Founder, Northwestern NLP Group Founder, Linguistics Deep Learning Reading Group Web & Social Media Coordinator, Linguistics Colloquium Reception Committee, Linguistics	2017–Present 2017–Present 2017–Present 2016–2017
PROFESSIONAL ACTIVITIES	Diversity & Inclusion Committee, NAACL 2019, Committee Member DevSci Cluster, Northwestern University, Member Institute of Electrical and Electronics Engineers (IEEE), Member Linguistic Society of America (LSA), Member Association for Computational Linguistics (ACL), Member Financial Industry Regulatory Authority (FINRA), Member	
LANGUAGES	Computer —Java, Python, R (ggplot2, plotly, lme4), C++, VBA, C#, L ^A T _E X, MATLAB/Octave Human —American Sign Language (ASL), Hebrew, Latin	