

Jeff Elmore

jelmore@gmail.com

919-523-4021

2827 Spann St. Columbia, SC, 29204

Education

- B.S. Applied Mathematics from North Carolina State University, 2008. Cum Laude.
- Graduate coursework in parallel computing and mathematical modeling.

Work @ Verb.ai

Summary

- Designed novel NLP and Machine Learning pipelines
- Fine-tuned generative models including gpt-3 and jurassic-1
- Applied rigorous evaluation, reliability, and validity analyses
- Co-Founded and raised £1 million seed round w/ Hoxton Ventures
- Exponential growth up to 40,000 users in 5 months after launch

Positions

- Nights and Weekends: 2020 to 2022
- Co-Founder and Chief Technology Officer: 2022 to Present

Work @ MetaMetrics, Inc.

Summary

- Conceived, designed, built, and maintained multiple complex software projects from web apps to custom language models and machine learning pipelines
- Co-authored numerous peer-reviewed publications and presented over 25 conference talks and poster sessions
- Managed teams of up to 8 engineers

Positions

- Senior Research Engineer: 2010 to 2022
- Senior Software Engineer: 2005 to 2010
- Technology Project Manager: 2004 to 2005
- Web Developer: 2002 to 2004

Peer-Reviewed Publications

- Fitzgerald, J. Relyea, J.E., **Elmore, J.** (2022) Academic Vocabulary Volume in Elementary Grades Disciplinary Textbooks: Disciplinary and Grade Differences. *Journal of Educational Psychology*, 114 (6), 1257
- Fitzgerald, J. **Elmore, J.**, Relyea, J.E. (2021). Academic Vocabulary Networks Matter for Students' Disciplinary Learning. *The Reading Teacher*, 74 (5), 569-579
- Fitzgerald, J., Relyea, J.E., **Elmore, J.**, & Hiebert, E. H. (2021) Has the Presence of First-Grade Core Reading Program Academic Vocabulary Changed Across Six Decades? *Reading Research Quarterly*, 56 (4), 737-759
- Fitzgerald, J., **Elmore, J.** Relyea, J.E., Stenner, A.J. (2020). Domain-specific academic vocabulary network development in elementary grades core disciplinary textbooks. *Journal of Educational Psychology*. 112 (5), 855
- Orellana-García, P., Valenzuela-Hasenohr, MF., Kung, M. **Elmore, J.** (2020) EVOC: un Instrumento para Evaluar Vocabulario en Español en Chile. *Magis, Revista Internacional de Investigación en Educación*. 13, 1-26
- Kim, J. S., Burkhauser, M. A., Mesite, L. M., Asher, C. A., Relyea, J. E., Fitzgerald, J., & **Elmore, J.** (2020). Improving reading comprehension, science domain knowledge, and reading engagement through a first-grade content literacy intervention. *Journal of Educational Psychology*.
<https://doi.org/10.1037/edu0000465>
- Graves, M. F., **Elmore, J.**, & Fitzgerald, J. (2019). The Vocabulary of Core Reading Programs. *Elementary School Journal*, 119 (3)
- Kosh, A. E., Greene, J. A., Murphy, P. K., Burdick, H., Firetto, C. M., & **Elmore, J.** (2018). Automated Scoring of Students' Small-Group Discussions to Assess Reading Ability. *Educational Measurement: Issues and Practice*, 37(2), 20-34. DOI: 10.1111/emip.12174
- Fitzgerald, J., **Elmore, J.** Kung, M., Stenner, A.J. (2017). The Conceptual Complexity of Vocabulary in Elementary Grades Core Science Program Textbooks. *Reading Research Quarterly*, 52(4), 417-442. DOI:10.1002/rrq.184
- Fitzgerald, J., **Elmore, J.**, Hiebert, E. H., Koons, H., Bowen, K., Sanford-Moore, E. E., Stenner, A. J. (2016). Text complexity and the early grades: The fuss and how recent research can help. *Phi Delta Kappan*.

Fitzgerald, J., **Elmore, J.**, Relyea-Kim, E. J., Hiebert, E. H., & Stenner, A. J. (2016). Has first-grade core-reading-program text complexity changed across six decades? *Reading Research Quarterly*, 51(1), 7-28. DOI: 10.1002/rrq.115

Fitzgerald, J., **Elmore, J.**, Koons, H., Hiebert, E. H., Bowen, K., Sanford-Moore, E. E., & Stenner, A. J. (2015). Important text characteristics for early-grades text complexity. *Journal of Educational Psychology*, 107, 4-29. DOI: 10.1037/a0037289

White Papers

Elmore, J. (2020). *Lexile WordBank and Academic Vocabulary In K-12*. Durham, NC: MetaMetrics, Inc.

Koons, H., **Elmore, J.** Sanford-Moore, E. Stenner, A.J. (2017) *The relationship between Lexile text measures and early grades Fountas & Pinnell reading levels*. Durham, NC: MetaMetrics, Inc.

Elmore, J., Lattanzio, S., Stenner, A.J., & Sanford-Moore, E.E. (2016). *Calculation of Lexile Word Measures using a Corpus-based Model and Student Performance Data*. Durham, NC: MetaMetrics, Inc.

Elmore, J. (2016). *Lexile Word Frequency Profiles*. Durham, NC: MetaMetrics, Inc.

Lattanzio, S., **Elmore, J.**, & Stenner, A.J. (2016). *Empirical Lexile Measures for Words*. Durham, NC: MetaMetrics, Inc.

Simpson, M.A., **Elmore, J.** Bickel, L. Price, R. (2015). *Initial Validation of Theory of Task Difficulty and Creation of Item Families*. Durham, NC: MetaMetrics Inc.

Elmore, J., Fitzgerald, J., Graves, M., & Bowen, K. (2015). *The Vocabulary of Elementary Disciplinary Texts*. Durham, NC: MetaMetrics, Inc.

Featured Presentations and Invited Talks

Elmore, J. (2018, February). *Examining Conceptually Complex Vocabulary in Elementary Grades Core Science Program Textbooks*. Paper presented at Distinguished Speaker Series at the Florida Center for Reading Research, Tallahassee, FL.

Koons, H. H., Fitzgerald, J., **Elmore, J.**, & Bowen, K., Hiebert, E. H., Sanford-Moore, E. E., & Stenner, A. J. (2013, December). *Primary-grade teachers' views of text complexity: An exploratory study*. Invited featured session at the annual meeting of the Literacy Research Association, Dallas.

Symposia

Elmore, J. (2018, July). Academic language and academic vocabulary: theory, instruction, and text. Symposium presented at the annual meeting of the Society for the Scientific Study of Reading, Brighton.

Oral Presentations and Posters

Elmore, J., Fitzgerald, J. (2019, July). *Identifying Salient Academic Words in Content-Area Texts using Semantic Network Centrality Measures*. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Toronto.

Fitzgerald, J., **Elmore, J.**, Relyea, J.E., & Stenner, A.J. (2019, July). *Has the presence of first-grade core reading program academic vocabulary changed across six decades?* Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Toronto.

Elmore, J. (2018, December). *Prefix and Suffix Frequency Trajectories*. Paper presented at the annual meeting of the Literacy Research Association, Indian Wells.

Elmore, J., Fitzgerald, J., Koons, H. H., & Hembry, I. (2018, December). *Examining General-Academic Vocabulary in Core Disciplinary Textbooks in Grades 1-12*. Paper presented at the annual meeting of the Literacy Research Association, Indian Wells.

Elmore, J., Fitzgerald, J., Eunung Relyea, J., & Kung, M. (2018, July). Domain-specific academic vocabulary development in elementary grades core disciplinary textbooks. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Brighton.

Elmore, J., Fitzgerald, J., Koons, H.H., Hembry, I., Graves, M., & Stenner, A.J. (December, 2017). *The Academic Vocabulary of Elementary Grades Core Disciplinary Texts*. Paper presented at the annual meeting of the Literacy Research Association, Tampa.

Elmore, J., Fitzgerald, J., Kung, M., & Stenner, A. J. (2017, July). *Conceptual Complexity of Vocabulary in Elementary Science Textbooks*. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Halifax.

Orellana, P., Kung, M., Stenner, J., **Elmore, J.**, Fitzgerald, J., & Valenzuela, M. F. (2017, July). *The Development of an Individual Computer-Based Spanish Vocabulary Assessment for Preschool through Eighth Grade*. Poster session presented at the Annual Conference of the Society for the Scientific Studies of Reading, Halifax, Nova Scotia.

Elleman, A., Compton, D., Steacy, L., **Elmore, J.**, & Fitzgerald, J. (2017 April). *Estimating the Semantic Network of Vocabulary Created by Teacher Talk and Text Reading in a Fifth-Grade Humanities Class*. Paper presented in the symposium Moving Toward a Multicomponent Model of Vocabulary Learning in School, at the annual meeting of the American Educational Research Association, San Antonio.

Elmore, J., Fitzgerald, J., Graves, M., Koons, H., Hembry, I. (2017, April). *The Academic Vocabulary of Elementary-Grades Core Disciplinary Textbooks*. Paper presented in the symposium Moving Toward a Multicomponent Model of Vocabulary Learning in School, at the annual meeting of the American Educational Research Association, San Antonio.

Elmore, J., Fitzgerald, J., Kung, M., Stenner, A.J. (2016, December). *The Conceptual Complexity of Vocabulary in Elementary-Grades Science Textbooks*. Paper presented at the annual meeting of the Literacy Research Association, Nashville, TN.

Elmore, J., Fitzgerald, J., Kung, M., Stenner, A.J. (2016, April). *The Conceptual Complexity of Vocabulary in Elementary-Grades Science Textbooks*. Paper presented at the annual meeting of the American Educational Research Association, Washington DC.

Kosh, A. E., Greene, J. A., Murphy, P. K., Burdick, H., Firetto, C., & **Elmore, J.** (2016, April). *Measuring reading comprehension through automated analysis of students' small-group discussions*. Poster presented at the 2016 National Council on Measurement in Education Conference, Washington, D.C.

Elmore, J., Fitzgerald, J., Stenner, A.J. (2016, February). *The Conceptual Complexity of Elementary Science Textbooks*. Poster presented at the annual Pacific Coast Research Conference, San Diego, CA.

Fitzgerald, J., **Elmore, J.**, Relyea-Kim, E.J., Stenner, A.J. (2015, December). *Dramatic Changes in the Complexity of a First Grade Core-Reading Program Across Six Decades*. Paper presented at the annual meeting of the Literacy Research Association, Carlsbad, CA.

Elmore, J., Fitzgerald, J., Graves, M., Bowen, K., Stenner, A.J., (2015, December). *The Vocabulary of Elementary Disciplinary Textbooks*. Paper presented at the annual meeting of the Literacy Research Association, Carlsbad, CA.

Elmore, J., Fitzgerald, J., Stenner, A. J. (2015, July). *Towards a Computational Model of Conceptual Complexity*. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Kona, Hawaii.

Elmore, J. (2015, April). *Practical Challenges and Some Solutions for Conducting Automated Corpus-Based Analysis of Vocabulary*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Fitzgerald, J., **Elmore, J.**, Koons, H. H. (2015, April). *The Complexity of a First-Grade Core Reading Program Over Seven Decades: The Early-Grades Lexile Text-Complexity System Analysis*. Poster presented at the annual meeting of the American Educational Research Association, Chicago.

Elmore, J., & Fitzgerald, J., Koons, H. H., & Hiebert, E. H. (2015, February). *Computer-Based Modeling of Text Characteristics*. Paper presented at the annual meeting of the Pacific Coast Regional Conference, San Diego.

Koons, H. H., **Elmore, J.**, & Bowen, K., & Stenner, A. J. (2015, February). *Multiple-Perspective Text-Complexity Scale Development*. Paper presented at the annual meeting of the Pacific Coast Regional Conference, San Diego.

Fitzgerald, J., & **Elmore, J.** (2014, December). *Beginning Reading Text Complexity: Results*. Paper presented in the symposium, Beginning Reader Text Complexity: Which Text Characteristics Matter Most, at the annual meeting of the Literacy Research Association, Dallas.

Graves, M. F., **Elmore, J.**, Bowen, K., Fitzgerald, J. Sanford-Moore, E. E., Koons, H. H., Copeland, M., Stenner, A. J. (2014, December). *The Vocabulary of Core Reading Programs*. Paper presented at the annual meeting of the Literacy Research Association, Dallas.

Elmore, J., & Fitzgerald, J., Koons, H. H., & Hiebert, E. H. (2014, December). *Computer-Based Modeling of Text Characteristics*. Paper presented in the

symposium, Beginning Reader Text Complexity: Which Text Characteristics Matter Most, at the annual meeting of the Literacy Research Association, Dallas.

Elmore, J., Hiebert, E. H., Fitzgerald, J., & Stenner, A. J. (2014, July). *Comparing two text-complexity scales*. Poster presented at the annual meeting of the Society for the Scientific Study of Reading, Santa Fe.

Koons, H. H., Hiebert, E. H., **Elmore, J.**, Fitzgerald, J., & Bowen, K. (2014, April). *What do "levels" really mean? A closer look at text leveling*. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia.

Elmore, J., Fitzgerald, J., Koons, H. H., Bowen, K. C., Sanford-Moore, E. E., Hiebert, E. H., & Stenner, A. J. (2014, April). *What random forests might do for educational research: Counterculture statistical modeling*. Poster presented at the annual meeting of the American Educational Research Association, Philadelphia.

Elmore, J. (2014, April). *The Ordinator: Comparing Apples and Oranges at Scale*. Poster presented at PyCon, Montréal.

Elmore, J., Lattanzio, S. M. (2013, October). *The Ordinator: More Effective Distributed Scale Creation and Validation*. Poster presented at CrowdConf, San Francisco.

Elmore J. (2013, March). *Measuring and modeling the complexity of children's books*. Paper presented at Presented at PyCon, Santa Clara, CA.

Elmore, J., & Baker, R. (2013, April). *Modeling computer-based text characteristics as potential predictors of text complexity*. Paper presentation in the symposium, Beginning reader text complexity: Scale development and best-predictor text characteristics, at the annual meeting of the American Educational Research Association, San Francisco.

Fitzgerald, J., **Elmore, J.**, & Simpson, M. A. (2013, April). *Text-complexity predictors*. Paper presentation in the symposium, Beginning-reader text complexity: Scale development and best-predictor text characteristics, at the annual meeting of the American Educational Research Association, San Francisco.

Bowen, K. **Elmore, J.**, Koons, H., Fitzgerald, J., Sanford-Moore, E., Stenner, J. Hiebert, E. (2013, February). *Text complexity evaluations consistent between teachers and students*. Poster presented at Pacific Coast Research Conference, San Diego.

Elmore, J., Fitzgerald, J., Koons, H., Bowen, K., Hiebert, E. H., Sanford-Moore, E., Stenner, A. J. (2013, February). *Which text characteristics predict beginning*

reader text complexity? Paper presented at the annual meeting of the Pacific Coast Regional Conference, San Diego.

Elmore J. (2012, March). *Parsing sentences with the other natural language tool: LinkGrammar.* Paper presented at PyCon, Santa Clara, CA.