

ALEX B. FINE

1001 Camden Ave., Durham, NC 27701

(336) 302-3251 ♦ abfine@gmail.com

OVERVIEW

Originally trained as a cognitive psychologist and linguist, I have over a decade of experience managing complex analytic and scientific projects in academic, government, and corporate settings. I take pride in being able to get to the core questions that motivate a project, and in helping others navigate uncertainty in the most intelligent and humane way. For the past year, I have trained as a hospital chaplain in order to deepen skills in listening, counseling, consensus-building, and to maintain composure and extend compassion during times of crisis.

EMPLOYMENT

Upaya Zen Institute & Duke University Hospital

March 2021 - present

Zen Buddhist Chaplaincy Student

Durham, NC

- Pursue formal training in Zen Buddhism (including meditation, temple protocol, and scriptural study) at the Chapel Hill Zen Center and Upaya Zen Institute Chaplaincy Program.
- Train as an interfaith hospital chaplain through supervised clinical pastoral education. Training emphasizes deep listening, interdisciplinary collaboration, and systems thinking.

Qntfy

October 2017 - July 2021

Director of Research

Durham, NC

- Plan, manage, and set strategy for analytics consulting projects. Manage relationships with senior leadership of non-profits and Fortune 500 companies.
- Lead and set the vision for Qntfy's peer-review publication efforts.
- Responsible for recruiting, hiring, and managing data scientists. Led an overhaul of management and performance review framework.

Flatiron Health

September 2016 - October 2017

Quantitative Scientist

New York, NY

- Consulted with partners in the life sciences industry to bring real-world evidence to bear on the development and marketing of novel cancer treatments.
- Initiated and managed streamlining of quality assurance of patient data. Collaborated with multiple internal and external stakeholders to reduce required to deliver data to clients from two days to under two hours.
- Developed internal R packages that allowed analysts, product managers, and sales teams to easily collaborate and query internal databases and promptly answer research and business questions.

Valassis Digital

August 2015 - August 2016

Data Scientist

Morrisville, NC

- Designed algorithms to infer causal links between online advertising campaigns and the real-world behavior of our clients' consumers.
- Created a systems-level analytic approach for geo-locating hundreds of millions of daily internet users for brick-and-mortar retail marketing.
- Led and maintained research collaborations with students and faculty from partner institutions including Duke, NC State, and SAMSI.

The Hebrew University of Jerusalem

Department of Psychology

Postdoctoral Research Scientist & Statistics Instructor

September 2014 - July 2015

Jerusalem, Israel

- Led and secured funding for a project using behavioral experiments and statistical modeling to understand how humans unconsciously learn patterns in auditory and visual stimuli.
- Designed and taught a graduate-level course on multilevel regression analysis using R.
- Co-authored successful grant application to the European Research Council (ERC).

University of Illinois at Urbana-Champaign

Department of Psychology

NIH Postdoctoral Fellow

June 2013 - September 2014

Champaign, IL

- Managed graduate students and undergraduate researchers in a project examining adaptation to talker variation in language comprehension.
- Organized and taught seminar on data analysis and visualization in R for students, post-docs, and faculty.

Boston University School of Medicine

Research Assistant

June 2006 - July 2008

Boston, MA

- Programmed behavioral experiments and administered behavioral experiments and standardized tests addressing cognitive and linguistic development in children with developmental disorders (e.g., autism).

EDUCATION

University of Rochester

PhD in Brain & Cognitive Sciences (minor: Linguistics)

Awarded NSF Graduate Research Fellowship

June 2013

University of North Carolina, Chapel Hill

B.A. in Linguistics & German

Thesis awarded Highest Honors

May 2006

SKILLS & EXPERTISE

Machine learning & statistics

Regression (logistic, linear, multilevel), clustering techniques, Bayesian inference, forecasting and time series modeling

Research

Experiment design, data visualization

Domain expertise

Cognitive science, mental and behavioral health, social media analytics, audience segmentation, NLP

Principal languages

Python, R, SQL, Bash

Tools

Workflow: Jupyter Notebooks, RStudio, PyCharm
Containerization: Docker, Kubernetes
Version control: Github, Gitlab
AWS: EC2, S3, RDS

SELECTED PUBLICATIONS

- Coppersmith, G., Fine, A. B., Crutchley, P., & Carroll, J. (2021). "Individual differences in the movement-mood relationship in digital life data". Proceedings of *The association for computational linguistics*.

- Fine, A. B., Crutchley, P., Blase, J., Carroll, J., & Coppersmith, G. (2020). "Assessing population-level symptoms of anxiety, depression, and suicide risk in real time using NLP applied to social media data". *Proceedings of Empirical Methods in Natural Language Processing Workshop on Natural Language Processing and Computational Social Science*.
- Kelly, K., Fine, A.B., & Coppersmith, G. (2020). "Social media data as a lens onto care-seeking behavior among women veterans of the US armed forces". *Proceedings of Empirical Methods in Natural Language Processing Workshop on Natural Language Processing and Computational Social Science*.
- Coppersmith, G., Leary, R., Crutchley, P., & Fine, A. B. (2018). "Natural Language Processing of Social Media as Screening for Suicide Risk". *Biomedical Informatics Insights*.
- Farmer, T., Fine, A. B., Misyak, J. B., Christiansen, M. H. (2017). "Reading span task performance, linguistic experience, and the processing of unexpected syntactic events.". *Quarterly Journal of Experimental Psychology*
- Fine, A. B., & Jaeger, T. F. (2016). "The Role of Verb Repetition in Cumulative Structural Priming in Comprehension". *Journal of Experimental Psychology: Learning, Memory & Cognition*.
- Pajak, B., Fine, A. B., Kleinschmidt, D., Jaeger, T. F. (2016). "Learning additional languages as hierarchical probabilistic inference: insights from L1 processing". *Language Learning*
- Fine, A. B., Frank, A., Jaeger, T. F., & Van Durme, B. (2014). "Biases in predicting the human language model". *Proceedings of the Association for Computational Linguistics*.
- Fine, A. B., Jaeger, T. F., Farmer, T. A., & Qian, T. (2013). "Rapid Expectation Adaptation during Syntactic Comprehension". *PLoS ONE*.
- Fine, A. & Jaeger, T. F. (2013). "Evidence for implicit learning in syntactic comprehension." *Cognitive Science*.
- Kleinschmidt, D. F., Fine, A. B., Jaeger, T. F. (2012). "A belief updating model of adaptation and cue combination in syntactic comprehension". In *Proceedings of the 34th Annual Meeting of the Cognitive Science Society*.
- Fine, A. B. and Jaeger, T.F. 2011. "Language comprehension is sensitive to changes in the reliability of lexical cues". In *Proceedings of the 33rd Annual Meeting of the Cognitive Science Society*, pp. 925-930, Boston, MA, USA.
- Fine, A. B., Qian, T., Jaeger, T. F., & Jacobs, R. A. (2010). "Syntactic Adaptation in Language Comprehension". *Proceedings of the Association for Computational Linguistics*.