Geoffrey Litt



Industry Experience

Panorama Education / Senior Software Engineer

June 2013 - May 2019

Panorama builds data analytics tools for K-12 schools. I joined early on as the third engineering hire. Panorama now serves 9 million students and employs over 120 people.

I focused on backend web engineering in Ruby on Rails, but also worked on frontend dev, product design, leading teams, interviewing, and mentoring. I founded and led a cross-functional squad focused on data infrastructure for research.

SELECTED PROJECTS

Free Response Analytics (2017): Built a text feedback analysis tool based on TF-IDF and clustering word embedding vectors. Created prototype and led team to ship to customers, contributing to 70% revenue growth for surveys product over the following 12 months.

Reporting interface (2013): Designed and implemented the entire data reporting interface as a solo project. Led major design iterations over next two years.

Education

MIT / PhD Student in Computer Science

August 2019 - present

In the Software Design Group with Daniel Jackson at CSAIL. Researching programming environments and data architectures that enable malleable, customizable software extensible by end-users. GPA: 5.0

Yale University / B.S. in EECS

August 2010 - May 2014

Distinction in EECS major, 3.77 GPA

Coursework in algorithms, databases, networks, discrete math, robotics, data analysis

Selected Publications

Conference publications

Geoffrey Litt, Sarah Lim, Martin Kleppmann, and Peter van Hardenberg. 2022. Peritext: A CRDT for Collaborative Rich Text Editing. Proceedings of the ACM on Human-Computer Interaction (PACMHCI), Volume 6, Issue CSCW2, Article 531, November 2022.

Geoffrey Litt, Daniel Jackson, Tyler Millis, Jessica Quaye. End-user software customization by direct manipulation of tabular data. Onward! 2020: Proceedings of the 2020 ACM SIGPLAN International Symposium on New Ideas, New Paradigms, and Reflections on Programming and Software, November 2020

Also workshop publications at LIVE, PaPoC, PLF.

Skills **PROGRAMMING LANGUAGES**

Proficient: TypeScript / JavaScript, Ruby, SQL, HTML/CSS Some experience with many other languages, including ML family, Lisps, C.