Alec Mori

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Education

Aug 2012 - May 2016	**University of Illinois**	B.S. Computer Science	Urbana, IL

- Minor in Mathematics

Work

Jan 2019 - Present   **Google** | Software Engineer - Search - Machine Learning   New York, NY
- Engineer on machine learning and data analysis platform
- Working with Youtube, Maps, Knowledge teams to improve model performance
- Creating tooling for model understandablity, such as SHAP values and intelligent plotting
- Integrating models into software development workflows by creating Python model representation

Jun 2018 - Oct 2018   **Yelp** | Machine Learning Engineer - Search UX   San Francisco, CA
- Developed machine learning infrastructure and models to improve search UI
- Designed experiments to understand triggering threshold effects on CTR and retention

Aug 2016 - Jun 2018   **Yelp** | Machine Learning Engineer - Ad Creative   San Francisco, CA
- Maintained reinforcement learning algorithms that handle 2000 QPS
- Improved MXE of click-through-rate prediction of reviews in advertisements by over 10%
- Oversaw formation of computer vision infrastructure and algorithms to advertisements at Yelp
- Implemented and tested contextual bandit for online review selection

Research

Jan 2015 - May 2015   **University of Illinois** | Research Assistant (USB)   Urbana, IL
- Tested security on the University of Illinois campus by dropping pseudo-malicious flash drives
- Wrote Android application backed by Google App Engine to monitor progress during experiment
- Paper "Users Really Do Plug in USB Drives They Find" can be found **here**

Jun 2013 - Aug 2013   **University of Illinois** | Research Assistant (Taxi)   Urbana, IL
- Used 4TB of New York City taxi data to simulate the effects of a SmartTaxi system
- Implemented KD-trees, ArcFlags, and Contraction Hierarchy to run simulation in < 1 day
- Implemented algorithm to estimate speed on NYC streets per hour; improved edge case predictions

Technology

Languages	**Systems**	**Libraries**
• Python	• AWS	• Scikit-learn
	• Docker	• Tensorflow
		• XGBoost
		• Keras

Other Work

May 2020 - Present   **Codepath** | Instructor   Remote
- Co-teach an algorithms class of over 1000 college students
- Help create content for burgeoning introductory class

Jan 2017 - Present   **alecmori.com** | Author and Maintainer   Remote
- Maintain a website for fans of the video game *Rock Band*
- Use historical click data to power autocomplete engine for search
- Site receives over 500 monthly active users