Alec Mori

alecmori@gmail.com · alecmori.com · 815-484-3279 · Github: **alecmori**

Education

Jan 2021 - Sep 2022	**University of Illinois** | M.S. Computer Science	Urbana, IL

• Focus in Data Science

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 interpretable 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
• Focused on simplifying and generalizing optimization workflows.

Aug 2016 - Jun 2018	**Yelp** | Machine Learning Engineer	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
• Developed machine learning infrastructure and models to improve search UI

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 / Curriculum Development	Remote

• Co-teach an algorithms class for 100's of college students
• Design curriculum and content for inchoate 24-session introductory data structures course

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