

JOSEF KLAFKA

jklaflka.github.io

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WORK EXPERIENCE

Software Engineer

August 2020 - Present

Epic Systems

- Design, code and review new features for clinical software
- Lead full-stack web and machine learning development projects in collaboration with other developers, designers, testers and project managers
- Propose and review new features using a mix of the Shape Up and Scrum agile development processes

Researcher

July 2018 - July 2020

Carnegie Mellon University and the University of Chicago

- Conducted research in natural language processing and cognitive science
- Built quantitative models of human and machine behavior from open-source datasets
- Presented talks and posters on my work at international conferences and published papers in scientific journals

EDUCATION

The University of Chicago

September 2014 - June 2018

BS in Mathematics and BA in Linguistics with honors

GPA: 3.82/4.00 Honors: Dean's List (all years)

SELECTED PROJECTS

Construct usage data collection and storage pipeline

- Created API for logging data from the autocomplete results a user saw for a search
- Every logging event adds 0 additional latency for users
- Added overnight data aggregation process which reduced data storage needs by 66% while allowing us to store the data for 3x longer

Make search results actionable with "quick action" bar

- Designed bar in the UI that other developers could add action buttons to
- Developed the first action: allow doctors to ordering a lab test with a single button
- Saved users up to a minute with each button click

Recommend content to users with machine learning

- Integrated novel recommendation engine into existing UI by showing content to users when they first click into the search bar
- Built internal prototype with fully-functional demo in a week during internal hackathon
- System learned based on each user and similar users, with an over time decay rate hyperparameter

SKILLS

Technologies

Python, C#, TypeScript, SQL, React, JavaScript, R, SCSS, HTML

Techniques

Object-oriented programming, unit testing, server programming, data mining, information retrieval, natural language processing, machine learning