Matan Kotler-Berkowitz

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EDUCATION

University of Rochester - *B.S. Computer Science, B.A. Political Science*   Expected May 2025

- 3.93 GPA; Dean's List all eligible semesters

EXPERIENCE

Internships

JusticeText - *Full-Stack Software Engineering Intern*   Summer 2022

- Spearheaded widely-used features for the JusticeText platform, an evidence-management software for public defenders, including scalable transcript reindexing and backups, streamlined notifications, and user payment history.

Red Hat - *Software Engineering Intern*   Summer 2020 & Summer 2021

- Developed key features for ChRIS, a medical technology application, and Mass Open Cloud, a public cloud computing platform, in collaboration with a team of researchers, developers, and designers.
- Engineered features including a graphical interface to simplify data processing pipelines, browser-based viewers for medical data files, and server usage visualizations.

Citizens for Juvenile Justice - *Policy and Research Intern*   January - May 2021

- Conducted research, data analysis, and visualization, and policy writing on juvenile justice and other youth-focused issues.

Anti-Defamation League - *Advocacy and Research Intern*   September-December 2020

- Worked on a wide variety of tasks and projects, including legislative advocacy on issues around police reform and digital harassment; anti-bias and anti-bullying education; legal, policy, and other research; and communications.

University of Rochester

RocLab (Student-Led Software Consultancy) - *Full-Stack Software Engineer* Spring 2023 - Present

- Architected key features for Unicycle, a campus-based e-commerce platform, including responsive mobile designs for main application pages, listing editing and reporting, and views tracking.

Computer Science Department (University of Rochester) - *Teaching Assistant*   Spring 2023

- Led workshop group for Data Structures and Algorithms course, teaching topics including asymptotic analysis, recursion, dynamic programming, graphs, trees, and other data structures.

Horizon Research Lab (University of Rochester) - *Research Assistant*   Spring 2022 - Present

- Engineered an interactive virtual reality viewer for Resurrect3D, a browser-based modeler.
- Integrated and extended a raytracing-based neighbor-search algorithm with Triforce, a physics simulation engine

Freelance Software Development & Consulting

OBR Investing - *Freelance Software Engineer*   April 2023

- Identified and fixed software errors in a Discord bot that prevented new customer signups.

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Torah Godly Play - *Freelance Software Engineer*   November - December 2022
- Created a 15-page Squarespace website, managed domains and payments

AndrewPessin.com - *Freelance Web Developer*   May - June 2021
- Designed and developed a custom WordPress website for author Andrew Pessin.

Gabe's Bar Mitzvah Website - *Freelance Web Developer*   February 2021
- Designed and developed a single-page invitation website for a bar mitzvah event.

Mind App - *Freelance Mobile App Developer*   February - May 2021
- Engineered new features and bug fixes for Mind App, a React Native-based athlete mental health tracking app.

Riverside Lactation Center - *Freelance Software Engineer*   April 2021
- Engineered backend solution to parse, format, and deliver custom patient form data to medical specialists.

Programming Tutoring   Fall 2020
- One-on-one tutoring sessions for middle schoolers, focusing on web design and development.

Harlow Group - *SSL Certificate Installer*   June 2016 - August 2016
- Migrated two websites to HTTPS by installing SSL certificates and transitioning WordPress installations.

Temple Beth Shalom - *Freelance Software Engineer*   May - June 2019
- Developed user-friendly macros to enable temple administrators to rapidly generate community calendars and populate with important dates, saving hundreds of hours of manual work.

Family Law Software - *Web Developer & Email Marketer*   2017 - 2018
- Designed and developed modern, responsive redesign of public-facing website with dozens of pages; integrated with legacy backend.
- Created email marketing campaign of twenty emails; wrote marketing text, designed email layout, and managed database of email addresses.

Volunteer Work

RagTag - *Volunteer Web Developer*   January - May 2021
- Implemented key components for a custom Wordpress theme for FreeFrom, a domestic-violence victims support organization.

JCDS Boston - *Volunteer Educator & Technology Consultant*   2019 - 2020
- Designed and co-taught a two-year middle-school elective programming course. Created instructional material and led students through the conceptualization, design, and implementation of programming projects.
- Provided technical support and consultation for virtual-reality learning experiences.

Code for Boston - *Volunteer Software Engineer*   May - September 2020
- Worked with a team of volunteers to contribute new features and bug fixes to the Social Security Benefit Calculator, a civic technology project backed by Congressman Seth Moulton.

Code for Social Good - *Web Developer & Systems Manager*   2017 - 2018

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- Contributed to a WordPress website encouraging young women to explore computer science; created custom pages, managed plugins, users, WordPress installations, database configurations, and domains.

Association for the Social Scientific Study of Jewry - *Volunteer Web Developer*   March-May 2018

- Designed and built a new website for the organization, migrating all content from the previous website and integrating with a legacy backend.

PROJECTS

MyGann+ (link) - A browser extension which adds a large series of enhancements, new features, and fixes to the Learning Management System used at Gann Academy; used by over 90% of students.

Mock Trial Rules of Evidence (link) - Rewrote mobile application in SwiftUI, added features including content-aware search and dynamically updated information.

Mock Trial Timekeeping (link) - A web application to help timekeeping for mock trial tournaments

T'Feeling (link) - A web application which encourages people to make, share, and be inspired by connections between t'fillot (Jewish prayers) and their emotions. Winner of honorable nention, Powered by Sefaria Contest 2020.

Drive Organizer for Google Drive™ (link) - A web application which enables users to rapidly organize files in Google Drive.

LEADERSHIP EXPERIENCE

University of Rochester Mock Trial

- Vice President (2023-2024): Supported the president and the executive board in accomplishing the competitive, educational, and social goals of the sixty-member, nationally-ranked organization.
- Tournament Director (2022-2023): Organized 250+ person tournament, managing dozens of team members and volunteers.

Gann Academy Theater Club

- Technical Director (2019-2020): Recruited and oversaw all crew members for two theater productions; helped organize and lead weekly club meetings.

PUBLICATIONS

Matan Kotler-Berkowitz and Elijah Wiesman, "Inconsistent With Youth: Equal Protection, Cruel and Unusual Punishment, and the Issue of the Incorrigibility Standard". University of San Francisco Law Review Forum, 2020.

Joshua Dankoff and Matan Kotler-Berkowitz, "Too Blue: A Vision for Non-Police Responses to Community Incidents in Boston". Citizens for Juvenile Justice, 2020.

TECHNICAL SKILLS

HTML, CSS, JavaScript, TypeScript, ReactJS, React Native, NodeJS, MondoDB, PostgreSQL, Java