Website: emmaoberstein.com

Technical Skills: C#, JavaScript, HTML, CSS, React.js, SQL, KQL, Java, Python, Microsoft Power Platform

## **Recent Work**

#### Microsoft

Senior Software Engineer (L64) Software Engineer II Software Engineer Software Engineering Intern

September 2021 - October 2023 September 2020 - September 2021 September 2018 – September 2020 June 2017 - September 2017

## Business Apps & Platforms: <u>Application Lifecycle Management</u>

- Architected a framework to scale Power Platform (a low-code application platform used by 97% of Fortune 500 companies) to a growing developer team. Introduced a unified way to import, export, and uninstall components, with hooks for customizing behavior during a component's lifecycle (e.g. on CRUD events).
  - Sped up iteration velocity, removed a common source of bugs, and improved end-user experience.
  - Oversaw the framework adoption by 12+ partner teams building over 40 component types, resulting in 100 million imports per week with a success rate of 99.99%.
  - o Improved platform reliability by implementing turnkey integration tests to ensure partner teams' components upheld lifecycle invariants.
  - o Consulted with partner teams on their projects to both aid in design and identify gaps where we could improve the platform to support new use cases.
  - Second author of a patent on building extensible software at scale: <u>US11720333B2</u>.
- Improved introspection capabilities for Power Platform to enable customers to understand their system state and how it changed over time. Developed an audit trail and new database views. These eliminated a large class of daily support tickets as customers were now diagnosing issues themselves. The APIs are requested 500k+ times per month with minimal support overhead.
- Diagnosed and resolved operational issues as part of a 6-person on-call rotation. Fielded customer issues, queried KQL for telemetry, and wrote SQL mitigation scripts for database inconsistencies. Created an auto-triage bot that reduced ticket volume by 11%.
- Developed an internal app to encourage and reward beta-testers within the organization, resulting in 100+ bugs filed during the pilot launch. Managed a vendor who worked on UI development.
- Founded an early-in-career mentorship program, organized events for multiple cohorts of interns, and participated as a mentor in several company-wide programs.

# Microsoft 365 Lighthouse: Authorization

- Developed <u>role-based access control</u> for enabling read and write permissions.
- Designed a multi-stage transition plan for integrating the authorization mechanics between two separate products that were being merged (Sales Advisor into Lighthouse).

### Applied Visions, Inc.

Software Engineering Intern

September 2016 - June 2017

Developed full-stack features and fixed system bugs for <u>Comic-BEE</u>, an interactive comic editor.

## Misc.

• HackDartmouth - Director of Technology, Alumni Judge

2015 - 2018, 2019 - 2021

**Dartmouth College** - Teaching Assistant for 5 Computer Science Courses

March 2016 - June 2017

Digital Arts, Leadership, & Innovation Lab - Web Developer

September 2015 - March 2018

### Education

Dartmouth College B.A. in Computer Science

GPA 3.90/4.0

Honors: Magna Cum Laude, Phi Beta Kappa, Neukom Scholar, Presidential Scholar, Rufus Choate Scholar