

Daniel Mikhail

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Experience

2022 - Present

Software Engineer at Verily Life Sciences (Alphabet) (*Boston, MA*)

- **Participant System:**
 - Led refactoring of a core data model and system, improving maintainability through service modularization and third-party integration abstraction
 - Reduced testing cycle time by 75% through decoupling frontend/backend test suites in Consent System
 - Authored comprehensive developer guides establishing best practices for service integration
- **Provider Console:**
 - Established frontend architecture patterns by implementing first React/TypeScript modules, creating documentation that became standard reference for 4+ teams
 - Designed and implemented modular Backend-for-Frontend (BFF) architecture enabling parallel development across frontend teams
 - Built reusable UI components following UX specifications, maintaining a11y compliance standards

Technologies: Go, React/TypeScript, GCP, FHIR, Protocol Buffers, gRPC

2018 - 2021

Software Production Engineer at Yahoo! (*Champaign, IL*)

- Facilitated cross-team communication for DSP advertisement pipeline, coordinating COPPA/GDPR compliance implementations and schema changes
- Developed monitoring dashboard using Lambda architecture for pipeline visibility
- Environment: Hadoop Ecosystem, AWS, RedHat clusters

Side Projects

Details of everything listed below can be found at mikhaidn.github.io/Plokmin

Custom Elgato Stream Deck Interface

Developed custom Python HID interface for Stream Deck hardware with cross-platform (MacOS, Windows) audio controls

Open Source Research

Increased the documented search space of two integer sequences (A100570 and A241922) on the OEIS by 6 orders of magnitude by taking advantage of bitmapping, multithreading, and other Python/Math gimmicks

Knowledge Dumps

Beginner-friendly guides I've made over the past year, inspired by the FAQs I get

- **Macarons** - A high level guide to making French Macarons
- **The Unix Shell** - A simplified list of goals for learning the Unix Shell
- **STEM College Prep** - A collection of my favorite pre-college STEM resources

Skills

- **Languages:** Go, Python, TypeScript/React, Java, MATLAB, R
- **Infrastructure:** Docker/Kubernetes, GCP, AWS, CI/CD
- **Development:** API Design, Distributed Systems, Testing
- **Domains:** Data Cleaning, Computer Graphics, Scientific Visualization

Education

2020 - 2024 **Masters of Computer Science**; University of Illinois at Urbana-Champaign

2014 - 2018 **BSc, Computer Science**; Rose-Hulman Institute of Technology (*Terre Haute, IN*)