

Mark Fickett

Full-stack web Software Engineer with 12 years experience. Seeking design- and implementation-heavy role at a Boston, MA (or remote) company with positive social impact and strong, diverse employee representation.

Contact

[LinkedIn](#)

Skills

- Primary languages: Java or Kotlin, Python, TypeScript, HTML/CSS, SQL
- I can work with: Go, C, Ruby, javascript, Django, jinja, Markdown, Makefiles, bash, C++
- Tools/tech: git, vim, Eclipse, REST, Vue.js, Linux, AWS, Google Cloud, JIRA, flask, gRPC, JDBC/JPA, Okta
- Practices: I draw readily from AGILE/scrum, continuous integration / TDD.

Valo Health, previously Integral Health (2020 Jan - Present, Senior Staff Software Engineer, Boston, MA)

Applying machine learning to drug discovery and development.

- Led technology selection for modern webapp stack across server framework, DAO (database access), IDL (interface definition language), frontend; production concerns from testing to auth. The stack was implemented in two major projects immediately. I designed the stack, prototyped alternatives, built team consensus and approval.
- Tech lead for internal drug discovery webapp rewrite. Designed, led implementation, cross-functional collaboration with chemists for product/UX definition. From starting tech selection to MVP (min viable product) with two engineers in two quarters. Kotlin, MySQL/JDBC, gRPC, Vue.js/TypeScript, Okta.
- Implemented our first automated ML data ingest pipeline. Cross-functional collaboration with data science from gathering requirements through handoff. Integrated with external APIs and internal job scheduling. Python, AWS (S3, Athena), bash, Jenkins.
- Worked with recruiter and senior eng to grow the software infrastructure team from 3 to 8, including outreach, interviewing, defining roles and rubrics.

Verily (2016 - 2020, Cambridge, MA)

Onduo (Tech Lead of Integrations, 2017 - 2020)

Virtual type 2 diabetes clinic.

- Design, implement, and launch multiple Java REST client and SFTP integrations which handle thousands of users' traffic reliably.
- Plan and perform maintenance, updates, monthly milestone releases coordinated with internal servers/apps and external partners.
- Own new cross-stack features through entire lifecycle (research, design, implement, integration test, analyse, document) based on provided PRDs.
- Example feature: Athena EHR integration for appointment scheduling, allowing patients to directly view and schedule appointments. Coordinated mobile implementation while completing the majority of the integration, backend, and frontend implementation.
- Coordinate work of 1-3 other junior and senior engineers. Collaborate with PMs and UX. Mentor new team members. Regular code reviews and design collaboration.
- Set up monitoring/alerting for production, maintain dev and test environments, set up an oncall rotation and train colleagues to participate in it.
- Part of a larger team of a few dozen engineers on Onduo.

All of Us (2016 - 2017)

NIH-funded project to collect health data from a million people for 10 years.

- Implement internal-facing REST API for the [Raw Data Repository](#), a CloudSQL medical research database. ([Example commits.](#))
- Design, prototype, and collaborate to implement Angular/TypeScript web FE researcher-facing [Workbench](#) UI for cloud hosted notebook data analysis. ([Some example commits.](#))
- Set up project infrastructure (linting, unit test presubmits, PIP module packaging), load test, document, plan development milestones.
- 1 of 2 primary engineers at Verily, collaborating closely with eng, PM, and UX [at The Broad Institute.](#)

Google (2011 - 2016, Cambridge, MA)

Project Sunroof (2015 - 2016)

- Data pipelines for [regional solar potential summaries](#), also [surfaced in Google Search.](#)
- Sole query/pipeline implementation, data definition, QA, and data publication.
- Processed solar data for 10s of millions of houses across the United States.
- Integration with Google Maps data, including working with Maps to fix quality issues in the data.
- Team of 6 engineers plus UX, PM, biz dev.

Google Play for Education (2012 - 2015)

- Founding member of a team of 6.
- Rapid prototyping of Android and web FE demos used to sell the product vision to management.
- Design and implement new bulk licensing database, UI, and business logic.
- Reimplement purchase order processing system. Design and implementation lead with 2 junior engineers. Cross-team/site collaboration with 2 other payments organizations/systems within Google. Handled \$10s of thousands revenue, and resolved the previous system's weekly customer-facing financial errors.

Google+ Publisher Widgets (2011 - 2012)

Designed, implemented, and launched widget configurator tool for web developers to get +1, Share, Snippet, and Brand Badge widgets for Google+. Served thousands of queries per day.

Simplified Google+ login flow by reducing number of different screens; UX and technical design and implementation. Added Thanksgiving Google Doodle integration (for 2011, [covered by Mashable](#)). Cross-team and cross-site collaboration. Drove tens of thousands of signups.

Sony Pictures, Imageworks (2008 - 2010, Los Angeles, CA)

Junior engineer on a team of 6 developing a desktop graphics application, [Katana](#). Image processing and UI work. The application was sold to The Foundry and licensed to ILM as a commercial product.

University of Pennsylvania (class of 2008, Philadelphia, PA)

[Digital Media Design](#), combining computer graphics, fine arts, and CS.

Outside of work

I spend my time with my wife in Union Square caring for our 1st child, making a [Pi-powered dice analysis machine](#) featured [on Ars](#), hiking, and [making art](#).