I am a software engineer at Google working on improving android's phone app. I grew up along side the field of UX and developed a passion for improving the ergonomics of human-computer interaction. At first I approached the problem from the perspective of UI design, "The Visual Display of Quantitative Information" had quite an impact on me, and showed me how much better our programs can be at talking to humans. Recently I have been more interested in improving that conversation from a different direction, using machine learning to answer questions and surface information that would otherwise be too difficult to communicate. I am transhumanist at heart and believe that we are quickly moving towards a time where the boundary between user and computer will fade. I want to help us get there.

Javascript	+++
HTML	+++
CSS	+++
Git	+++
SVN	+
Bash	++
Spark	++
Tensorflow	++
Mathematica	++
Matlab	+
SQL	+++
Python	+++
Java	++
Ruby	+++
Photoshop	++
2019 -	2022

Google - Dialer Team Software Engineer

Worked on improving the default android "phone" app.

First significant project was helping finish up the automatic call screening feature.

Worked with one other employee to prototype a new test framework that is now in use to run the same test suite as unit/emulator/device tests.

Handled client side implementation of the initial i18n pilot for call screen (Japanese support).

Built crowdsourcing flows to collect caller ID/tagging information.

Working with: java, kotlin, android

Tophatter - Full Stack Software Engineer

2017 - 2018

H1: Started off working on front end web. Pitched, got 2 weeks to build, and demoed a react version of Tophatter. Didn't get support to move forward with it.

H2: Learned Rails and transitioned to full stack.

H3: Moved to data team, was tasked with personalization. Pitched, architected, and implemented collaborative filtering model for product recommendation.

H4: Worked with team of 3 to rebuild product deduplication pipeline from the ground up. Used neural networks to process item features into a few feature vectors, generated candidates using faiss vector similarity search, judged if candidates were actually duplicates using a random forest (couldn't generate good enough training data to make the NN I was playing with better)

H5: Pitched, designed, and built a human review queue for our model to get ground truth data for product deduplication. This improved the performance of the NN I had set aside before, deduplication now powered by a siamese network. Closed the training loop so the system will continue to improve with time.

H6: Infrastructure work on data pipelines. Built service that efficiently tracks recent user-product interactions using ring buffers in redis. Requested a week to work on web performance and had a big win: stat sig +6% new user conversion and +4% total revenue on web.

Worked with: rails, coffeescript, python, spark, tensorflow

Pandora - Web Team Engineer

2015 - 2017

Worked on angular UI for a tool for artists to send messages to their listeners.

Spent last year and a half working on complete react rewrite of web client.

Implemented Pandora Premium subscription tier on web.

Worked with: react, javascript, HTML, CSS

Rdio - Web Team Engineer

2014 - 2015

Finally learned how to really work effectively in a software development team as an intern here.

Dropped out of school to pursue a full time software engineering position.

Worked on "music feed", the current rdio.com homepage page.

Implemented a user exit survey that collects much more information than before.

Pitched, created, and deployed a viewport tracker for the content on our homepage.

Implemented Rdio Select subscription tier on web.

Upgraded multiple admin pages with better visualizations/UX.

Worked with: javascript(backbone and react), HTML, CSS, SQL, python

Facebook - Site Integrity Team Intern

Worked with content review staff to improve internal tools that had been slowing them down.

Really enjoyed the challenge of making an interface that is intuitive and looks good.

Productivity could have been better, I was afraid of asking for help because I wanted to look smart. I learned from my experience.

Worked with: PHP, HTML, CSS

- 2013

see http://y4le.github.io/react-resume/ for full resume