# Elgin Beloy

Self-taught, 20 y/o Google engineer with a passion for ML

elginbeloy.com

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## EXPERIENCE

### Google, Mountain View — *Software Engineer*

OCT 2019 - DEC 2020 (1 year, 3 months), JUL 2020 - Present (7 months)

Hired on my 18th birthday, I first worked as an engineer on the Google Smart Displays and the Google Home App. I worked across teams to help create new experiences for Smart Display Sleep Intelligence and Home Automation Routines. After some time off to research quantitative trading, I re-joined Google, this time on Payments. During my time at Google I've worked in 18 languages using a wide-array of frameworks (some proprietary with only internal documentation) to create/delete/modify 30,000+ lines of production quality code.

### Self Employed — *Quant*

DEC 2020 - Present

I religiously read econometrics, Marcus Lopez de Prado, Ernie Chan, and any Financial ML papers I can find. This helps inform my development of my backtester and various strategies (both rule based and ML) I am working on. I also love to backtest more traditional strategies I find online.

### Storr, San Francisco — *Software Engineer*

JUL 2019 - OCT 2019

As one of the first few engineers at this SF-born startup, I helped to build a high-growth E-commerce app, developing a JavaScript frontend analytics system and an Android + IOS React Native app powered by a GAE backend w/ Firebase and BigQuery.

### ML Startup, San Francisco — Founder

APR 2018 - JUL 2019

At 16 I dropped out of highschool to start a company in the ML space. Moving from MN to California, I raised $2m in seed funding from accredited investors, appointed a CEO with more business acumen than myself, and grew a team from zero to eight people in a year. Ultimately I left, but as the co-founder and lead engineer, I delivered machine learning solutions and consulting services to large U.S enterprises while in parallel developing an automatic machine learning platform with Python (Django, Tensorflow) and JavaScript (Vue).

## SKILLS

Python, Java, C++, JavaScript (node), R, Rust, SQL, MongoDB, AWS, GCloud.

Web Scraping, NLP, Time-Series Analysis, Probability Theory, Financial Data Cleaning, Programmatic Portfolio Analysis..

## PROJECTS

### Backtester — *Python*

A US equities, tick-level (w/ NBBO) backtester:
- REST downloading of tick/NBBO data from polygon.io
- Data cleaning (NA values, splits/dividends, liquidations, etc...)
- Various bar time granularities including support for information driven bar types
- Metrics including: Sharpe + Sortino ratio, returns distribution, days in market, passive basket returns, etc...

### ML Similar Songs Bot —

*Python* (*Selenium, Keras*)

A program that crawls YouTube Music to find songs similar to an advertising candidate. Song similarity is based on the cosine distance between the output vector of a genre classification CNN (removing the softmax layer) trained on audio spectrograms.