

# William Qin

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## EXPERIENCE

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### Wayfair

Boston, MA

#### Senior Software Engineer

Nov 2020 – Current.

- Spearheaded redesign of shelf restocking system with an event-driven microservice. Improved work load efficiency by 49%.
- Devised and developed an asynchronous batch processor for determining work completion SLAs for 15 warehouses. Utilized aerospike caching and orchestrate over 90,000 orders a day.
- Designed and led implementation of picking demand planner and dynamic tour builder; account for throughput, reduced picker movements, increased conveyor belt delivery from 35% to 92%, and reduced manual processing from 60% to 8%.
- Developed an auto-enrollment service using daily sales averages, improving inventory forecasting and positioning for over 700,000 items.
- Built ingestion data pipeline with Faust/Apache Kafka for ranking and allocating inventory to thousands of picks everyday. Fanning in and consolidating data for hydrating PostgreSQL database.
- Created warehouse notifications and enforcement to increase cognizance and worker's adherence from 80% to 96%.
- Migrated and decoupled legacy services and systems over to Google Cloud Platform (GCP).
- Created Jenkins Jobs, FastAPI endpoints, setup datadog monitoring and grafana dashboards, resolved incidents and PagerDuties, wrote runbooks and infohubs and resolved docker and buildkite issues.

### Fannie Mae

Reston, VA

#### Software Engineering Intern

Jun 2019 – Aug 2019

- Developed tool to visualize dependencies on DDN using D3.js and built Rest API for it to communicate with a web app dashboard to generate monthly trends and projection reports.

### Federal Deposit Insurance Corporation (FDIC)

Washington, DC

#### Modeling & Research Intern

May 2017 – Aug 2017

- Extracted and analyzed historical interest rate data from all U.S. bank branches since 2007 for ~50 consumer products. Modeled rate changes and analyzed bank's performance metrics and deposit insurance data.

### Millennium Challenge Corporation

Washington, DC

#### Intern

Jun 2016 – Aug 2016

- Created internal website displaying metrics and all documents (financial reports, congressional notices) associated with agency's foreign aid projects for company-wide quick access and analytics.

## PROJECT

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### BonusAlly.com

Calculates the best credit cards for users based on an in depth breakdown of their spending habits. Taking account of bonuses, annual fees, and other criterias to narrow down options from all the major credit card issuers. Enable users by saving their progress to firebase.

## EDUCATION

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### UNIVERSITY OF MARYLAND

College Park, MD

B.S., Computer Science

B.S., Mathematics

B.S., Economics

## SKILLS

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Google Cloud Certified Professional Cloud Architect Series ID: 78604

Expires: June 2025

#### Languages

Python · Java · SQL · PHP · Kotlin · R · C · MATLAB · HTML/CSS · JavaScript

#### Relevant Coursework

Database Design · Advanced Data Structures · Artificial Intelligence · Computational Methods · Advanced Algorithms  
Advanced Calculus · Econometrics · Functional Programming · Game Theory · Statistical Computing · Probability Theory