

# Michael Garate

Staff Software Engineer | mpgarate.com  
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## EXPERIENCE

### **Etsy**, New York City

*Staff Software Engineer, Information Retrieval Systems*, April 2022-Current

### **LinkedIn**, Sunnyvale | [linkedin.com](https://www.linkedin.com/in/mpgarate/)

*Senior Software Engineer, Production Infrastructure*, January 2020-Current

- Designed system to monitor 300,000+ software firewall clients
- Reduced team on-call alerts from 1/day to 1/month with auto-remediation
- Identified and resolved a longstanding, previously undetected 40% failure rate in a distributed messaging pipeline
- Increased deploy frequency 5x by automating and standardizing the release process
- Published blog post of [team accomplishments in 2020](#)

### **Etsy**, San Francisco | [etsy.com](https://www.etsy.com)

*Senior Software Engineer, Machine Learning Infrastructure*, August 2017-January 2020

Promoted from SWE L2 to L3.1 (March 2018), and from SWE L3.1 to L3.2 (October 2019)

- Led migration of ML systems from bare metal to Kubernetes on Google Cloud Platform
- Scaled ML inference services from 0 to 700k documents per second for search, ads, and recommendations
- Wrote code for launching ML training jobs, streaming TBs of data from distributed file stores, and improving runtime performance of data processing in Python, C++, and Bash
- Automated code formatting, build, test, and deploy pipelines to reduce toil

### **Etsy**, New York City | [etsy.com](https://www.etsy.com)

*Software Engineer, Ads and Marketing Services*, July 2015-August 2017

Promoted from SWE L1 to L2 (March 2016)

- Grew sales by \$200M+ with automatic CPC bidding system for Google Shopping Ads
- Created workflow to store billions of time-sensitive records on ad performance
- Authored enum library to help catch bugs with static analysis before the code is run
- Reduced Etsy's overall MySQL CPU time by 5% through a batch job optimization

## EDUCATION

### **New York University, Gallatin School of Individualized Study**

- BA in Individualized Study: **Technological Entrepreneurship**, combining undergrad and graduate level Computer Science with business courses. GPA: 3.65, Dean's List

### **hackNY Fellowship** | [hackny.org](https://hackny.org)

## OPEN SOURCE

- Contributed **fastText optimization** that reduced Etsy's vector serialization from hours to minutes
- Presented at SRE[IN]con20 about [building trust with code reviews](#)

## TECHNICAL SKILLS

- Languages: Python, Bash, Rust, PHP, Java, Ruby, SQL, JavaScript, Go, C
- Platform tools: Docker, Linux, Kubernetes, Ansible, GCP, Terraform, Chef, Git