# **Thomas Gebert**

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## Computer skills

Java 17	Kakfa	ZeroMQ	Node.JS
Python	Apache Spark	C++	Scala
SQL	Erlang/OTP	F#	FFMpeg
Clojure	Linux	Go	TLA+
.NET Framework	Shell Scripting	JavaScript	Docker

#### **Education**

#### Western Governor's University

Salt Lake City, UT

B.S. Computer Science

### Experience

**Lead Bank** New York, New York

Senior Software Engineer

September 2023 – November 2023

- O Helped scale and maintain the ACH processing system.
- O Worked with AWS Lambda, AWS Step Functions, Go, Java, and DynamoDB.
- o used Message Queues like SQS to communicate between services.
- O Utilized Docker for local development and testing of applications.
- O Enhanced deployment scripts to handle different types of sevices.
- Oversaw the onboarding of multiple clients onto our platform.

#### **CUNY City Tech**

New York, New York

August 2022 – June 2023

- O Taught introductory programming to computer engineering students.
  - Introductory and advanced Python 3 and Java 17.
- O Created and graded homework assignments and tests.
- O Coded interactive learning modules in JavaScript and Python for students to practice.
- O Worked with professors designing cyber-physical systems to help formalize robotics applications.
- O Given a perfect score for teacher reviews for two semesters in a row.

OnFrontiers Inc. New York, New York *February 2023 – May 2023* 

Principal Software Engineer

*Adjunct Lecturer* (Contract)

- Facilitated video communication of clients to potential consulting jobs.
- O Redesigned core platform to utilize an asynchronous pipeline.
  - Presented my design to Junior and Senior engineers, as well as CTO.
  - Design was approved by team and CTO.
  - Personally led the implementation of the design.
  - Increased throughput by fifteen percent.

Reddit Inc.

New York, New York

Senior Software Engineer

August 2022 – November 2022

- O Used Python, Go, and Docker to help rebuild the image resizing service.
- O Utilized Kafka to build distributed systems.
- O Wrote build configuration scripts in Python.
- O Worked on deployments to Google Cloud Platform.
- O Designed and presented new a new version of image caching service.
  - Implemented design after being approved by committee.
  - Decreased cost of image-resizing by over forty percent by moving service in-house instead of outsourcing.

#### Walmart Global Tech

New York, New York

Staff Software Engineer

*August* 2021 – *August* 2022

- Mentored junior and mid-level engineers in distributed computing and functional programming.
- O Made use of message queues to schedule and partition work across multiple nodes.
- O Delegated and managed work across several engineers when designing distributed systems.
- O Built NLU pipelines for the Chatbot on walmart.com utilizing the Microsoft Bot Framework.
  - Utilized the Microsoft Bot Framework, F# and C#.
- O Architected the multi-cluster design of the Chatbot.
  - Decreased chatbot latency by over thirty percent across multiple clusters.
  - Coordinated the release of multi-cluster deployment of chatbot.
- O Utilized Microsoft Azure, Linux, and Python to build infrastructure.
- O Designed and built APIs with GraphQL.

Thrive Global New York, New York

Contract Engineer

*March* 2021 – *August* 2021

- O Utilized Node.js to build the localization features.
- O Used Docker to build microservices.
- O Wrote build scripts in Python.

Apple Inc. New York, New York

Senior Software Engineer

September 2018 – February 2021

- O Designed and built a telemetry and analytics system for finding potential bottlenecks in the cache indexes utilizing Java 11, Clojure, Kafka, Apache Spark, and Tableau.
- O Fixed issues and bugs in the iTunes server backend.
- O Built a Kafka-based buffering service to reduce load on indexing and caching for iTunes.
- O Maintained and expanded rule engine for iTunes, utilizing Objective-C and C++.
- O Deployed Java code onto Amazon Web Services and Linux.

#### Walmart Global Tech (Jet.com)

Hoboken, New Jersey

July 2016 – August 2018

- Senior Software Engineer
- Wrote Microservices in F#.
- O Utilized the Microsoft Azure stack.
- $\,\circ\,$  Used Apache Kafka to send data between services.
- O Utilized Python in conjuction with Apache Spark ML to figure out optimal time to send email.
- $\,\circ\,$  Rebuilt the transactional email system to scale to Jet.com size.
- O Taught the F# language during code bootcamps.

Tone Mobile New York, New York

Software Engineer

*September* 2015 – *June* 2016

- Wrote and maintained Erlang backends.
- O Created modules for Ejabberd.
- O Integrated chat server with Node.js backend.

**New York University** 

New York, New York

*March* 2015 – *September* 2015

Research Scientist

- Debug Angular.JS frontends.
- Debug Scala backends.
- Help write Haskell backends.
- O Programmatically use FFMpeg for video transcoding.

Dallas, Texas *Application Developer May* 2014 – *February* 2015 Senico, LLC Dallas, Texas *June* 2013 – *April* 2014 Software Engineer **Propulsion Labs** Dallas, Texas *January 2013 – June 2013* Software Engineer

**Amerinational Management Services** 

Orlando, Florida Web Developer January 2012 – December 2012

**Lockheed Martin** Orlando, Florida Software Engineering Intern *May* 2011 – *August* 2011

## **Public Speaking**

Lambda Days 2023 - Why Design Your Own Levels When Your Computer Can Do it?: Presented an introduction to doing WebGL with ClojureScript, in addition to showing a few simple procedural level generation algorithms for games

Lambda Days 2022 - Predicting and Preventing Chaos with Formal Methods in TLA+: Presented in Krakow, Poland, an introduction to formal methods via a brief description and demonstration of the TLA+ specification language.

Lambda Days 2020 - Distributed Hash Tables, Video, and Fun!: Presented in Krakow, Poland, the same talk as stated above.

Clojure Conj 2019 - Distributed Hash Tables, Video, and Fun!: Presented in Durham, North Carolina, a demonstration of a project involving a video sharing system using distributed hash tables and to farm out video transcoding.

#### **Certifications**

ITIL 4	2021
PeopleCert  Project None and the Management	2021
Project+ Management CompTIA	2021
Practical Guide to Trading	2023
Interactive Brokers	