# **Thomas Gebert**

## 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

### **Certifications**

ITIL 4 PeopleCert	2021
Project+ Management CompTIA	2021
Practical Guide to Trading Interactive Brokers	2023

# 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.
- 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

Adjunct Lecturer (Contract)

*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.
- 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

- O 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.
- 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.
- 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.
- Used Docker to build microservices.
- O Wrote build scripts in Python.

Apple Inc.

New York, New York

Senior Software Engineer

September 2018 – February 2021

- 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

Senior Software Engineer

*July 2016 – August 2018* 

- O Wrote Microservices in F#.
- Utilized the Microsoft Azure stack.
- O 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.
- O 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* 

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

New York University

New York, New York

Orlando, Florida

Research Scientist

*March* 2015 – *September* 2015

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

Sq1 Dallas, Texas

Application Developer May 2014 – February 2015

Senico, LLC Dallas, Texas

Software Engineer June 2013 – April 2014

Propulsion Labs Dallas, Texas

Software Engineer January 2013 – June 2013

Amerinational Management Services

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.