

Thomas Gebert

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Computer skills

Clojure
Haskell
Erlang/OTP
Java

ZeroMQ
C
F#
Go

Kakfa
JavaScript
Apache Spark
Node.JS

Git
Scala
FFMpeg
TLA+

Education

Western Governor's University

B.S. Computer Science

Salt Lake City, UT

University of York

Ph.D. Computer Science, Formal Methods

Currently Enrolled

York, United Kingdom

Experience

CUNY City Tech

Adjunct Lecturer

New York, New York

August 2022 – Present

- Teach introductory programming to computer engineering students.

Reddit Inc.

Senior Software Engineer

New York, New York

August 2022 – Present

- Worked on the image resizing and caching service.

Walmart Global Tech

Staff Software Engineer

New York, New York

August 2021 – August 2022

- Built NLU pipelines for the Chatbot on walmart.com
- Coordinated the release of multi-cluster deployment of chatbot.

Apple Inc.

Senior Software Engineer

New York, New York

September 2018 – February 2021

- Designed and built a telemetry and analytics system for finding potential bottlenecks in the cache indexes utilizing Clojure, Kafka, Apache Spark, and Tableau.
- Fixed issues and bugs in the iTunes server backend.
- Built a Kafka-based buffering service to reduce load on indexing and caching for iTunes.

Jet.com

Senior Software Engineer

Hoboken, New Jersey

July 2016 – August 2018

- Wrote Microservices in F#.
- Utilized the Microsoft Azure stack.
- Used Apache Kafka to send data between services.
- Rebuilt the transactional email system to scale to Jet.com size.
- Taught the F# language during code bootcamps.

Tone Mobile*Software Engineer*

- Write and maintain Erlang backends.
- Create modules for Ejabberd.
- Integrate chat server with Node.js backend.

New York, New York
September 2015 – June 2016

New York University*Research Scientist*

- Debug AngularJS frontends.
- Debug Scala backends.
- Help write Haskell backends.
- Programmatically use FFMpeg for video transcoding.

New York, New York
March 2015 – September 2015

Sq1*Application Developer*

Dallas, Texas
May 2014 – February 2015

Senico, LLC*Software Engineer*

Dallas, Texas
June 2013 – April 2014

Propulsion Labs*Software Engineer*

Dallas, Texas
January 2013 – June 2013

Amerinational Management Services*Web Developer*

Orlando, Florida
January 2012 – December 2012

Lockheed Martin*Software Engineering Intern*

Orlando, Florida
May 2011 – August 2011

Public Speaking

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.

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

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.

Side Projects

FSharp.Csv: A reflection-based CSV serializer, written in F#, designed to handle large, multi-gigabyte CSV files, while providing a simple, functional interface, and remaining relatively fast.

Vertigo.Json: A reflection-based JSON serializer and deserializer, designed to be used with F#, with an emphasis on being easy-to-use, fast, and null-safe.

Scudlib: A library, written in Clojure, to do homomorphic encryption. Currently supports the Pallier algorithm.

Frameworkey: Erlang: A scalable MVC Framework for Erlang allowing for the composition of route handlers.

Framework: **key: Promise Edition:** An MVC framework for Node.JS allowing for composable routes.

For more, please visit gitlab.com/tombert