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# JEFFREY B. STEWART

Bedford, MA, USA  $\diamond$  jeff@stewart.net

## EXPERIENCE

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### Google

2003 - 2021, 2022-present

Senior Staff Software Engineer

Mountain View, CA, Pittsburgh, PA, and Cambridge, MA

- Led the migration of Google Search to SSL-by-default (**proudest professional accomplishment**)
- Led capacity management of an edge video caching system handling hundreds of Tbps globally
- Reduced the frontend serving costs of Google Search by 20%
- Managed 6 direct reports
- Seamlessly migrated auto-complete to the Search frontend; increasing QPS by 10x
- Latency lead for Google Web Search, leading a multidisciplinary team changing development culture
- Stabilized a thrashing infrastructure team, delivering 4 iterations of productivity metrics data warehouse
- Built office culture through the first 100 hires at Google Pittsburgh as the first site engineer.
- Built and scaled Gmail from internal pilot through early launch; scaling for the first 100M users
- Drove cross-organizational planning for 3 iterations of Google's developer productivity data warehouse, safely leveraging sensitive employee productivity data using the Flume distributed data processing framework.
- Sole author of Gmail POP3 (patented algorithm), and SMTP MSA, prototyped IMAP system
- Awarded the most prestigious award for project achievement at Google for my Gmail work

### Meta Platforms, Inc. (formerly Facebook)

2021-2022

Software Engineer E7

Cambridge, MA

- Led development of core components of the next generation PaaS offering
- Infused an operationally aware culture into a team in crisis
- Established change management expectations that stabilized the offering

## EDUCATION

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### Carnegie Mellon University

1996

M.S. Information Networking

QPA: 3.9

### Carnegie Mellon University

1995

B.S. with University Honors Electrical and Computer Engineering

QPA: 3.82

## TECHNICAL STRENGTHS

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### Development Skills

multi-site technical leadership across time zones and cultures

### Computer Languages

Go (golang), Java, Kotlin, C++, Rust, SQL, Python

Will quickly learn those you are using

### Protocols & APIs

Protocol Buffers, Stubby/gRPC, Thrift, HTTP, Flume/Hadoop

## PUBLICATIONS

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### Distributed Latency Profiling through Critical Path Tracing

ACM Queue, Feb 2022

Communications of the ACM, Jan 2023

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## PATENTS

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### **US9319243B2**

*2016*

Message server that retains messages deleted by one client application for access by another client application

## PERSONAL

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### **Third Degree Black Belt**

*2015 - present*

American Kenpo Karate

Ballroom Dance

*2023 - present*