# Scott Gasch

# Engineering Manager and Software Engineer

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**OBJECTIVE** 

I'm seeking a leadership position working on an impactful, interesting project with smart colleagues in the Seattle area.

EXPERIENCE

### Facebook / M2 Engineering Manager

OCTOBER 2020 - JANUARY 2022, BELLEVUE, WA

#### Al Infrastructure (2020-2022)

- I lead an org of four teams and ~forty engineers that owned the authoring SDK, pipeline orchestration, fleet scheduling, and observability used to train the majority of ML models at Facebook.
- Measured and improved training reliability, oversaw several successful migrations in the training stack, and improved team engineering culture.

#### Google / Senior Engineering Manager / Senior Staff Software Engineer

DECEMBER 2005 - JANUARY 2020, KIRKLAND, WA

#### Developer Infrastructure (2016-2020)

- I led an effort to make Google's world-class, internal developer tools available to our cloud customers and Alphabet companies.
- My organization also supported and improved several key tools that keep Google's ~50k internal developers working efficiently and productively.
- I took Google's <u>Cloud Source Repositories</u> (git hosting and code search) product from being stuck in alpha for years to a full GA launch and increased adoption from under 10k to 50k+ 30dA users.
- I managed six teams and ~fifty software engineers.
- One of those teams (fifteen people including an L1 manager) I hired directly; the other teams I inherited and integrated.
- I overhauled <u>cs.chromium.org</u> and <u>created <u>cs.opensource.google</u>, <u>cs.android.com</u> and <u>source.bazel.build</u>.
  </u>
- Experience defining and communicating a vision, setting goals and priorities, building a healthy engineering culture, growing engineers' careers, working with new managers, hiring, building teams, relocating teams, and (unfortunately) managing people out when it was necessary.
- Responsible for tools designed to make code easier to read, understand, analyze, edit, search, review and debug.
- Proven track record of working effectively across the engineering organization and with partner teams like UX, SRE, and tech writing.

#### DoubleClick Search (2009-2016)

- <u>DoubleClick Search</u> is the industry-leading <u>SEM</u> solution.
- In 2009, however, it was the industry's #4 SEM solution. Because of the work of my team we went from #4 to #1 in a span of less than five years growing spend under management by an order of magnitude.
- I led the DS backend, infrastructure and bid optimization teams, a group of ~twenty engineers.
- I designed and implemented the data model, stats schema and reporting stack for DS.
- These DS internal systems were largely rebuilt based on the semantic functionality requirements of a "legacy" system, redesigned for improved speed and scale. This rebuild happened during a period of about 9 months in 2009-10 during a "code yellow" which I helped to lead.
- I've systematically measured and improved the latency of the DS reporting system, a key competitive advantage for the product. Reports that used to take 30+ minutes now finish in seconds.
- The codebase is C++, java, continuous processing, and mapreduce.

#### AdWords Optimization (2005-2009)

- Tech Lead of a project implemented by five engineers computing actionable intelligence for advertisers. It involved large scale data processing, indexing, segmentation, storage, and reporting.
- Tech Lead for AdWords backend services for keyword semantic clustering, generation and suggestion.
- The keyword-related projects I led were responsible for hundreds of millions of USD of annual incremental revenue for Google.
- These projects were implemented in C++ and java, and involved mapreduce.

#### Miscellaneous

- Recipient of two Google Operating Committee awards (2008, 2009)
- Recipient of one Google Citizenship award (2014).
- DoubleClick Search was a top 10 company achievement for Google in 2010.
- Recipient of numerous peer bonuses, spot bonuses and kudos awards.
- Heavily involved in the mentoring and hiring programs.

#### Microsoft / Software Design Engineer

JULY 1998 - NOVEMBER 2005, REDMOND, WA

#### Windows NT Kernel (2000-2005)

- Windows architecture and Win32/64 programming expert.
- I wrote and maintained stress, functionality and regression test code for the NT PE loader, process management, thread dispatcher, and memory management kernel subsystems.
- Experience with user and kernel mode debugging; wrote several debugger extensions for ntsd and kd.
- Worked in C, x86/x64/IA64 assembly.
- Found hundreds of bugs in the Windows codebase.
- Bootstrapped my team's code review and mentoring processes.
- Helped to ship Windows XP, Windows Server 2003, XPSP2, WSSP1.

#### Windows for Express Networks (1998-2000)

 Implemented the file sharing (via SMB) and Internet connection sharing (via NAT) features on a fixed-function "server appliance" device.

#### IBM, Nortel / Engineering Internships

SUMMER 1995, 1996, 1997, RESEARCH TRIANGLE PARK, NC

#### Virginia Tech / Bachelor of Science, Computer Science

MAY 1998, BLACKSBURG, VA

Team and organization leadership, project planning and management, vision, defining and communicating clear goals, building teams, growing managers and engineers, building a strong engineering culture, executing.

C, Java, C++, Python, parallel and distributed computing, continuous processing pipelines, "big data", software optimization.

Available upon request

**EDUCATION** 

## SKILLS

# REFERENCES