a résumé

matthew j weaver

I am a domain-independent and scale-independent troubleshooter.

1 Finding me

- Keybase : https://keybase.io/mjw
- Github : https://github.com/matthewjweaver
- This document : https://mjw.wtf/weaver-resume.pdf
- matt@ice-nine.org

2 One-minute précis

I am an accomplished, domain-independent troubleshooter who enjoys solving problems. I also help groups of people work together to solve problems.

I have worked with all components of computing and communication. This includes the wires, protocols, systems, applications, and users. It also extends to the organizations responsible for implementing and operating products and systems.

I've helped build & operate systems comprised of tens, hundreds, and millions of components. I've worked in organizations of anywhere from two people to hundreds of thousands of people.

I've built patchwork, solar-powered wireless networks providing broadband access to remote mountain communities. I've been responsible for the 99.99% availability of Google web search. I helped rescue healthcare.gov.

I specialize in infrastructure and end-to-end problem solving. I enjoy serving as valued counsel and guide to leaders. I can rapidly absorb and distill complexity. I can explain complicated ideas and problems in simple terms. I inspire confidence in people. I remain comfortable and focused in situations of maximum ambiguity, chaos, and pressure.

3 Expertise

3.1 10 years of leadership and management experience

- Direct management of tens of people
- Have built teams and organizations from scratch
- Have helped build hiring processes
- Have conducted hundreds of interviews
- Have participated in and run hiring committees

3.2 25 years of systems development and operation experience

- C (embedded, systems, applications)
- C++ (systems, applications)
- UNIX (OpenBSD, FreeBSD, Linux, OS X)
- Service & Network Administration (VPNs, Routing, Systems Infrastructure)
- Security and Cryptography

4 Experience

4.1 2015/10 - *present* : Rogue Leader (and DJ), United States Digital Service

- USDS is a new organization in the Executive Office of the President, bringing world class technical talent into government to work directly on engineering to improve the usefulness, experience, and reliability of government services.
  - *The idea, hatched by [Federal CTO] Smith's predecessor Todd Park (who still works as advisor to the president from Silicon Valley) is to replicate the success of the Healthcare.gov rescue and bring the best engineering and design talent from Silicon Valley and elsewhere into the government. –* Steven Levy, Medium
- I advise USDS leadership (Administrator Mikey Dickerson, Deputy Administrator Haley Van Dyck).
- I built and run USDS's rapid response team.
  - We help restore critical services at various government agencies after catastrophic incidents.
  - We help, directly on behalf of senior leadership, in various high-stakes/high-ambiguity situations when critical services are at risk.
- I helped establish, and continue to advise, the leadership of embedded USDS teams at other agencies, including the Department of Defense and IRS.
- White House, USDS HQ : https://whitehouse.gov/usds/
- Wikipedia : https://en.wikipedia.org/wiki/United_States_Digital_Service
- Backchannel: Stock Options? Don't Need 'Em! I'm Coding For Uncle Sam, Steven Levy; https://medium.com/backchannel/the-tiny-team-taking-on-a-massive-reform-of-government-it-b5f87b85e2dc

4.2 2014/10 - 2015/10 : Rogue Leader, USDS at US Department of Veteran Affairs

- Built the first in-agency USDS team, inside one of the largest bureaucracies in the country.
  - *Even among D.C.'s new technorati, people view Weaver as someone separate from the fray. [. . .] Maybe it's because he was the one guy who, if he didn't answer an emergency call, the whole search engine might go down. Or maybe it's because in a group of brilliant engineers, Weaver, as one of his new colleagues puts it, stands out as "someone who is, like, superhero-fucking-brilliant."* – Jon Gertner, Fast Company
- USDS at VA : http://va.gov/ds/
- Fast Company : Inside Obama's Stealth Startup, Jon Gertner; https://www.fastcompany.com/3046756/obama-and-his-geeks

4.3 2014/02 - 2014/04 : Ad-hoc engineer for healthcare.gov, QSSI, Inc.

- Tapped by Mikey Dickerson to operate the by-then functional healthcare.gov site for the last two months of the first ACA open enrollment period, overseeing the enrollment of more than 50% of the 8 million Americans who signed up.
- Acted as primarily responsible party for site operations during the largest volume enrollment days, including the last day of open enrollment, under intense scrutiny from HHS, the media, and the White House.
- These numbers were essential to insuring the long-term viability of the ACA.
- NY Times : Health Exchange Enrollment Ended With a Surge, Robert Pear; http://www.nytimes.com/2014/05/02/us/late-surge-brought-enrollments-under-health-law-to-8-million.html
- TIME : CODE RED, Steven Brill; http://time.com/10228/obamas-trauma-team/

4.4 2005/02 - 2014/02 : Site Ecologist (various roles), Google Inc.

- 2013 - 2014
  - Worked on Google search's serving software stack, contributing experience to various infrastructure work that more than halved the release cycle of Google search's web server.

- 2011 - 2012
  - Worked on the "new" Google Maps product, contributing experience and guidance to a rewrite that included a move into the rest of the search serving stack.
- 2010
  - Worked on internal response and mitigation following the security incidents now referred to as Operation Aurora, helping to make sure engineering infrastructure helps protect Google's billions of users from advanced, persistent threats including nation-states.
- 2009
  - Worked on the team developing early versions of Google's globally distributed storage layer, Spanner, contributing raw operational experience as Spanner moved from the whiteboard to production.
- 2005 - 2009
  - Member of a small team (grew from ~10 to ~20 during this period) with ultimate operational responsibility for Google search, a product used by 1/6th of the Earth's population every single day.
  - Participated in the invention of the Site Reliability Engineer (SRE), a new role that has come to define the forefront of development-based operations throughout the world.
  - Managed a team of 17 with direct, primary responsibility for all operational aspects of Google search.
  - Shared hiring and firing responsibilities for the larger site reliability engineering organization.

4.5   2002/11 - 2004/08 : Operator, Developer, & Partner, Nedernet, Inc.

- Developed software and hardware to extend & support a wireless ISP in Nederland, Colorado.
- Responsible for systems planning, design, implementation.
- Experience with computing and network hardware in outdoor environments (Rocky Mountains).
- Experience with non-grid power sources and radio hardware.
- Designed, built, and deployed provisioning and operations software.
- Nedernet : http://www.nedernet.net/solar.php

4.6   2002/11 - 2003/03 : Contractor, YAS Broadband Ventures, Inc.

- Developed parts of a Kerberos V authentication framework, including x509 certificate support and public-key authentication.

4.7   2001/01 - 2002/09 : Operator, Developer, The Measurement Factory, Inc.

- Led packaging of Web Polygraph bench marking software in a turnkey HTTP testing appliance.
- Helped design, develop, administrate, and troubleshoot both HTTP testing appliances and performance tests of HTTP intermediaries.
- Web Polygraph : http://www.web-polygraph.org/
- The Measurement Factory : http://www.measurement-factory.com/

5   Education

- Bachelor of Science : Computer Science, Rochester Institute of Technology
- Unfinished Associate's Degree : Graphic Design, Rochester Institute of Technology