Yuki Hamada Senior Staff Software Engineer

Mountain View, CA · yuki.hamada@gmail.com · +1 650-555-0127 · linkedin.com/in/yukihamada

PROFILE SUMMARY

- **Senior Staff Software Engineer** with **13 years** in **distributed compute and simulation infrastructure**, setting the technical direction for Waymo's simulation compute platform across 7 teams and about 90 engineers.
- Builds in **C++**, Python and Go with Bazel, on Kubernetes and **Google Cloud**, with Apache Beam batch pipelines, Prometheus and Grafana for monitoring and gRPC between services.
- Strongest in **multi-year technical strategy**, **scheduling and capacity design for large batch jobs** and **org-wide migrations**, using design docs, cost models and staged rollouts to get 7 teams onto one plan.
- Works with the directors of simulation and evaluation, 6 engineering managers and the safety teams that depend on the results, and sits on the infrastructure architecture council.
- Coaches 4 senior and staff engineers, sponsors promotion cases at Staff and Senior Staff, and runs the design doc review that every new simulation service goes through.

TECHNICAL SKILLS

Languages:	C++, Python, Go, SQL
Distributed Systems & Design:	System Design, Distributed Systems, Batch Scheduling, gRPC, Capacity Modeling
Cloud & Infrastructure:	Google Cloud, Kubernetes, Terraform, Docker
Data & Messaging:	Apache Beam, Spanner, Google Cloud Pub/Sub, Apache Parquet
Reliability & Observability:	SLOs, Error Budgets, Prometheus, Grafana, Incident Command
Build, CI & Developer Tooling:	Bazel, GitHub Actions, Remote Build Execution
Technical Leadership:	Technical Strategy, Design Docs, Architecture Reviews, Promotion Sponsorship

EDUCATION

University of Michigan — **B.S.E. in Computer Science** — Ann Arbor, MI · Sep 2009 to May 2013

WORK EXPERIENCE

Waymo — **Senior Staff Software Engineer, Simulation Infrastructure** — Mountain View, CA · Oct 2019 to Present

- Wrote the 3-year strategy for simulation compute that 7 teams adopted, moving scenario runs from fixed per-team clusters to one shared scheduler and cutting compute cost per simulated mile by **38%** in 2 years.
- Authored the design doc for a deterministic replay format that removed hidden timing from scenario runs, adopted by 5 teams and cutting flaky simulation results from 6% to **0.7%**.
- Led the move of 140 simulation pipelines from a legacy job runner to the shared scheduler across 7 teams, with parallel runs and weekly milestones, and retired the old runner **1 quarter early**.
- Set SLOs and error budgets for the simulation services that release evaluations depend on, cutting evaluations blocked by infrastructure failures from 9 a quarter to **2**.
- Built the 2026 infrastructure plan with the directors of simulation and evaluation and 6 engineering managers, turning a backlog of platform debt into funded work that closed **21 of 26** items.

VMware — **Senior Member of Technical Staff to Staff Engineer, vSphere** — Palo Alto, CA · Jul 2013 to Sep 2019

- Built a shared test harness that simulated full clusters for the vSphere DRS placement code, picked up by 9 teams and cutting integration test runs from 3 hours to **25 minutes**.
- Rewrote VM placement scoring in C++ for clusters of up to 64 hosts, cutting placement time during host maintenance from 9 s to **1.4 s**.
- Mentored 5 engineers through their first design docs as tech lead of the DRS placement team, and **3 of them** were promoted to Senior Member of Technical Staff.