

Yangqingwei (Yang) Shi

shiyangqingwei@gmail.com | +1 (206) 399-5476 | linkedin.com/shiyangqingwei

PROFESSIONAL EXPERIENCE

Google LLC

San Francisco, CA

SWE-SRE III, Personalized Service Health, Google Cloud

Mar 2023 -

- Propose and develop a system that can process millions of GCP maintenance events and communicate with GCP end users in a fast and accurate way.

Current

SWE-SRE III, Virtual Testing, Google Cloud

Nov 2019 -

- Introduced and defined RPC-based coverage metric in turnup testing to help test owners understand and measure the quality of their tests running in VM-based testbeds;
- Unblocked the critical path for testing cloud turnup by onboarding multiple Google Production services (Spanner, Remote Logs, Data Push) into a VM-based testing environment;
- Reduced ~50% dollar cost of running tests by overcommitting CPUs on sole-tenant GCE VMs;
- Initiated a shell-script based method to record user interaction history during their tests and hosted an intern to implement the tools;
- Followed SRE best practice to ensure the reliability of our testing environment (e.g., configuring alerts, creating dashboards, writing playbooks, etc.);
- Participated in on-call rotation to manage incidents and handle customer tickets.

Mar 2023

SWE II, Virtual Cluster, Google Cloud

Apr 2018 -

- Designed and implemented an automated workflow to update multiple package versions across all GCE Linux VMs in a cluster statelessly;
- Implemented tools to manage cluster creation and deletion primarily in Python and Go.

Nov 2019

Amazon Inc

Seattle, WA

Software Development Intern, Customer Service Technology Department

May 2017 -

- Designed a new format to configure contextual-variable UI presentation for customer service agents' instruction cards and implemented the authoring process using Java and AWS.

Aug 2017

Peking University, Institute of Software

Beijing, China

Research Assistant in Programming Languages Lab, supervised by Dr. Yingfei Xiong

May 2014 -

- Developed a novel model of mutation analysis that analyzed mutants during the execution of the program and forked the execution only when a mutant led to a new system state.

June 2016

Carnegie Mellon University, School of Computer Science

Pittsburgh, PA

Research Intern at Institute of Software Research, supervised by Dr. Jonathan Aldrich

Jul 2015 -

- Extended a module system based on Wyvern Programming Language to enforce the architectural behavior by integrating descriptions directly into the language.

Nov 2015

EDUCATION

Carnegie Mellon University, School of Computer Science

Pittsburgh, PA

Master of Science in Computer Science (program acceptance rate < 4%)

Sep 2016 - Dec 2017

Peking University, School of Electronic Engineering and Computer Science

Beijing, China

Bachelor of Science in Computer Science, *SUMMA CUM LAUDE* | Rank: 5/52

Sep 2012 - Jun 2016

SKILLS

Programming	Python, Golang, C, C++, Shell, Java, Javascript, SQL, MATLAB, HTML, PHP, OCaml
Tools	Linux, Git, Mercurial, Bazel, LaTeX, Tensorflow, Django, OpenCV, OpenGL, LLVM
Cloud Platforms	Google Cloud Platform (GCP), Amazon Web Services (AWS)