

# Yangqingwei (Yang) Shi

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

## PROFESSIONAL EXPERIENCE

---

### Google LLC

SWE-SRE III, Personalized Service Health, Google Cloud

San Francisco, CA

Mar 2023 -

Current

- Co-lead the launch of a GCP product feature that allows external customers to list all scheduled maintenance events that impact their project;
- 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.

SWE-SRE III, Virtual Testing, Google Cloud

Nov 2019 -

Mar 2023

- 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.

SWE II, Virtual Cluster, Google Cloud

Apr 2018 -

Nov 2019

- 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.

### Amazon Inc

Software Development Intern, Customer Service Technology Department

Seattle, WA

May 2017 -

Aug 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.

**Peking University**, Institute of Software

Beijing, China

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

May 2014 -

June 2016

- 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.

**Carnegie Mellon University**, School of Computer Science

Pittsburgh, PA

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

Jul 2015 -

Nov 2015

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

## 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

---

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