Yichi Zhang

(510) 365-0767 | billyzyc65535@gmail.com | linkedin.com/in/yichi-zhang-75a67a167

Education

University of California at Berkeley Berkeley, CA
B.A. in Computer Science, M.S. in Electrical Engineering and Computer Science *Aug. 2017 – May 2022*

Experience

Software Engineer July 2022 – Present
Google LLC *Mountain View, CA*

- Engineered core user journeys for the Play Commerce team, utilizing Java, Kotlin, and Jetpack Compose to build and maintain Server-Driven UI (SDUI) components for the Google Play Store buy flow.
- Spearheaded the unification of the Play Store order history experience, taking ownership to architect a new "Transaction Details" page that standardizes post-purchase interactions and establishes a scalable foundation for feature expansions.
- Contributed to a major conversion optimization initiative by refining the purchase flow, which successfully drove an increase in the overall checkout conversion rate from 22% to 24% in 2025.
- Developed high-visibility checkout features and modernized the promotional offers architecture, reliably serving hundreds of millions of user impressions per month.
- Accelerated team developer velocity by taking ownership of a critical internal client development tool, streamlining workflows for the broader engineering team.
- Ensured high availability by navigating a massively scaled codebase and participating in on-call rotations to triage, debug, and resolve critical production bugs.

Software Researcher Dec 2020 – May 2022
Berkeley NetSys Lab | Professor Scott Shenker *Berkeley, CA*

- Co-developed the RingWorld project, a datacenter consensus protocol utilizing a ring topology.
- Engineered a scripted multi-machine simulation test bench in C/C++ from scratch, leveraging self-taught low-level Linux network socket programming.
- Modeled and analyzed theoretical protocol scalability in deployments double the recommended ideal size.
- Evaluated the impact of various data transports over diverse network setups, publishing findings in a comprehensive master's thesis at zyc.moe/master_thesis.

Projects

NARROW | *Open vSwitch, OpenFlow, Distributed Systems* Jan 2021 – May 2021

- Architected a distributed anti-DDoS protocol based on the Extensible Internet architecture to mitigate large-scale network attacks.
- Engineered a simulated network environment utilizing Open vSwitch, developing a control program to dynamically modify OpenFlow rules in real-time.
- Conducted comprehensive resource profiling to determine edge server performance requirements for optimal protocol deployment.
- Authored a detailed technical report on protocol performance and resource scaling: zyc.moe/cs268_report.pdf

TLDR | *Python, Ray* Sept 2020 – Dec 2020

- Stands for ***T**ime travel with **L**arge-scale, **D**istributed event-sou**R**ced systems*
- Evaluated and integrated the Ray framework to architect a large-scale, distributed event-sourced system.
- Benchmarked multiple concurrency paradigms, analyzing the performance tradeoffs between single and multi-actor system architectures.
- Engineered state snapshot capabilities and inherent "time-traveling" data recovery features using Python.
- Documented system architecture and paradigm test results in a technical report: zyc.moe/cs262_report.pdf

Technical Skills

Languages: Java, Kotlin, Python, C/C++, GoLang, SQL, JavaScript, Shell
Frameworks and Technologies: Jetpack Compose, Server-Driven UI, JUnit, Kubernetes, LLMs, Prompt Engineering
Developer Tools: Git, Docker, Bazel, VS Code, Google Antigravity