Willis Wang

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Experience

SWE Intern **Amazon**
May 2021 - Aug 2021 Seattle, WA
- Designed and implementated a favorites system for internal AWS account management.
- Deployed application to 100k+ developer accounts within Amazon's Consumer Division.

Software Engineer Intern **8th Wall**
May 2020 - Aug 2020 Palo Alto, CA
- Architected storage, backup, retention, and restoration system for 10k+ customer repositories.
- Automated database migrations, rollback, and CDN updates across all internal engineering infrastructure.

Course Staff - Operating Systems **UC Berkeley**
Jan 2021 - Present Berkeley, CA
- Hosted social events and office hours for class of 400.
- Created and revised rubric for exams, homeworks, and projects, including PintOS instructional OS.
- Taught concepts including concurrency, virtual memory, caching, filesystems, and memory protection.

Research

Dataspread **dataspread.github.io**
Jan 2021 - Present Java
- A storage engine integrating spreadsheets as a front-end interface and PosgreSQL as a back-end database.
- Researching and developing scheduler for formula-related changes, prioritizing visual updates for cells within view while maintaining correctness.

Delta Lake Caching **github.com/willislwang/delta_caching**
Oct 2020 - Dec 2020 Scala
- Research project for CS 262A to achieve fast single-row access time for Delta Lake
- Worked with Databricks engineers on a write-back caching layer using RocksDB.

COVID-19 Contact Tracing
Aug 2020 - Jan 2021 Python
- Modeled COVID-19 contact tracing using magnetometer sensors in smartphones to preserve user privacy.

Education

University of California, Berkeley **Computer Science BA**
Aug 2018 - May 2022 3.72 GPA
Coursework: Graduate Computer Systems, Operating Systems, Database Systems, Networking, Computer Architecture (CPU/hardware design, memory systems, multi-level parallelism), Computer Security, Data Structures, Algorithms

Skills

Languages: C/C++, Python, Java, Scala, x86 Assembly, Javascript, HTML/CSS, SQL
Domains: Databases, Distributed Systems, Kernel Development, Full-Stack/Backend Development
Tools: AWS (Lambda, S3, DynamoDB, SQS, Cloudformation), PostgreSQL, MongoDB, Git, GDB, Linux
Libraries/Frameworks: Node, Express, React, Redux-Saga