# Krishelle Hardson-Hurley, Software Engineer

khardsonhurley@gmail.com | LinkedIn

#### WORK EXPERIENCE

## Infrastructure Software Engineer at Dropbox, Disaster Readiness

San Francisco, CA Jan 2021 - Present

- **Software Development and Design** Contributed features to failover tooling, all in GoLang. Designed and implemented a productionized distributed system for executing failovers reliably, with persistent state, centralized logging, monitoring, and a multihomed architecture. Designed and mentored summer intern (3 months) to build a system for detecting single-homed services, leading to a full-time offer and first offer-accept of the summer.
- Operations Served on a 24-hour on-call rotation, serving as button pusher for failing Dropbox from one data center to another monthly (5+ performed as button pusher), as well as being trained and available to perform a failover in the event of a natural disaster, within 2 hours of notification.
- Collaboration and Leadership Worked with the Networking team to lead and execute 3 metro isolation Disaster Recovery tests (DRTs). Lead weekly working group meetings, tracked technical Als, coordinated with critical service on-calls, wrote engineering-wide comms including detailed expected impact documents, led the DRTs in real-time, and wrote associated retrospectives. This role required a deep understanding of the interdependencies of various distributed systems that power Dropbox every day. The success of these DRTs unlocked a key business objective: 4 hr Recovery Time Objective (RTO), bringing us to parity with the industry and representing a significant reduction of one of Dropbox's existential risks.
- **Direction and Strategy** Worked with other team leaders to brainstorm and write team vision and charter. Presented team strategy during company-wide "Trustober" talk. Worked with the Networking and Data Center Operations teams to analyze risk to physical data centers and define abort criteria for which we should trigger a failover to mitigate risk caused by a catastrophic event located near the core data center.

# Product Software Engineer at Dropbox, Enterprise

San Francisco, CA

Jan 2020 - Dec 2020

- Software Development Added features to web and desktop clients. Built with a combination of Python and Typescript.
- Operations Served on a 24-hour on-call rotation servicing customer product bugs. Triaged, investigated, and debugged technical issues while
  communicating progress to Customer Support via Jira. Facilitated a postmortem for a large customer outage with CX and Product stakeholders.

#### Infrastructure Software Engineer at Dropbox, Developer Virtualization

San Francisco, CA

Aug 2019 - Dec 2019

• **Software Development** - Worked with the Data Center Ops team to introduce new Mac devices into their existing repair workflow. Built an integration between Jira and the Mac health checker that created tickets when a device failed. Ensured a quick repair cycle for new devices, improved reliability, and efficiency for the Data Center team saving an estimated ~200 engineer hours per quarter. Built with Golang, Python, and Grafana.

## Site Reliability Engineer at Dropbox, Networking

San Francisco, CA

Nov 2016 – Aug 2019

- **Software/System Design and Development** Developed tools to automate manual operations on the Network, with the goal of improving overall reliability. Worked with Network Engineers to understand and replicate their manual processes into more reliable automated systems. Skills included Python programming, use of various APIs, integration with internal services, and development of documentation/training.
- Leadership Lead a group of ~10 engineers to complete the ambiguous task of creating a New Product Introduction (NPI) process for assessing new
  products for the Network. The process resulted in saved time (~100 engineer hours/yr) and lowered the risk of a future network failure.
- Operations Served on two 24-hour on-call rotations, one responsible for the network and the other Dropbox's external availability.

# Adjunct Faculty at the University of San Diego

Remote

July 2018 - July 2019

Served as a part-time instructor for online Master-level Education courses (5 sections total). Course Titles: "Engineering Design Process in Math and Science Education" and "Artistic Modeling and Representation in Math and Science Education."

#### Coding Curriculum Developer at Adecco, onsite at Google

San Francisco. CA

Sep 2017 - Dec 2017

Served a 3-month part-time contract supporting a start-up called Grasshopper of Google's Incubator Area 120.

Software Development and Lesson Design - Designed and wrote coding lessons for an Android App that teaches beginning users to code. Wrote
Javascript code for starter and solution code. Wrote queries for validation of code using ESquery (AST query library).

## High School Math/ Spanish Teacher at State of California

Various

Aug 2010 - June 2016

Taught for 5 years at San Diego Unified School District (SDUSD) and 1 year at San Leandro Unified School District (SLUSD).

Program Management - Served 5 years as Competitive Sports Program Coordinator in SDUSD. Managed ~\$100K budget, travel coordination, practice schedules, and fundraising for 50 students and their parents. The team took first place at Nationals in 2014, and second place in 2015.

# **EDUCATION**

Master of Education, University of San Diego

San Diego, CA

May 2010 - May 2013

- **Specialization** Mathematics, Science, and Technology Education (GPA: 3.91/4.0).
- Honors NSF Robert Novce Mathematics Teacher Scholarship Recipient.

## Bachelor of Art, University of San Diego

San Diego, CA

Oct 2006 - May 2010

- Majors Mathematics and Spanish Double Major (GPA: 3.86/4.0).
  - Earned California Single Subject Teaching Credential in Mathematics, Introductory Spanish, and Physical Education.
- Honors Summa cum laude, Honors Program, Phi Beta Kappa, Outstanding Female Senior Alcala Award Recipient.