# **Gregory Jerian**

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# WORK EXPERIENCE

#### Dropbox | San Francisco, CA

Software Engineer

- Created monitoring and alerting pipeline for GPU hardware failures as part of Dropbox's AI-first initiative
- Improved logging, alerting, and availability zone selection for new instance provisioning in our AWS EC2 pipeline
- Converted fleet from unsecure shared to cryptographically secure HMAC-derived IPMI credentials
- Automated DNS record generation for PDUs, previously a time-consuming and manual process
- Created a machine learning model with xgboost to predict rack drain times, saving network engineers time when prioritizing racks to drain during ToR switch maintenance
- Updated Chef binary version fleet-wide and created workflow for a regular update cadence
- Created monitoring to automatically route hosts with read-only mountpoints to technicians for repair
- Led an effort to reduce oncall toil and fix alerts, reducing alert time by 50% over a 3-month period

# Software Engineer Intern

- Wrote backfill and validation utilities for device and network records in our network source of truth database
- Designed an automatic DHCP configuration generator, improving config generation speeds by 7x

# UC Berkeley EECS Department | Berkeley, CA

Teaching Assistant – Great Ideas of Computer Architecture

- Led discussion and lab sections of around 40 students
- Helped students navigate and understand difficult course concepts
- Managed lab assistants to effectively answer questions and gauge student understanding
- Created assignments, wrote exam problems, and graded student work

# EDUCATION

#### University of California, Berkeley | Berkeley, CA Bachelor's in Computer Science, GPA: 3.91

Coursework (selected):

- Introduction to Database Systems
- Introduction to Machine Learning
- Principles and Techniques of Data Science
- Introduction to Artificial Intelligence
- Optimization Models in Engineering

- Computer Security
- Operating Systems and System Programming
- Efficient Algorithms and Intractable Problems
- Designing, Visualizing, and Understanding Deep Neural Networks

# PROJECTS

#### Neural Network Image Classifier (Python)

- Designed a deep convolutional neural network with pytorch to classify images from the ImageNet dataset
- Used various image perturbation methods to build robustness and allow for better transfer learning

# Encrypted File Sharing System (Golang)

- Utilized cryptographic primitives such as AES and HMAC to build an end-to-end encrypted file sharing system
- Supported sharing files between multiple users as well as a mechanism to revoke access

# SKILLS

- Advanced proficiency in Python, Golang, Java
- Proficient in Git, SQL, AWS, C, Chef, Linux, HTML, CSS, LaTeX

# May 2020 – Aug. 2020

Jul. 2021 - Present

# Jun. 2019 – May 2020

Jun. 2017 – May 2021