Philip Zhang

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EDUCATION

B.S., Computer Science   GPA: 3.9
University of California, San Diego
📅 Sept 2020 – Jun 2024   📍 La Jolla, California

EXPERIENCE

Software Engineering Intern, Terminal OS Platform
Stripe
📅 Jun 2023 – Sept 2023   📍 Seattle, Washington

- Updated developer tooling and application logic to support landscape orientation on the Terminal Reader application
- Implemented landscape variants of Terminal Reader application screens
- Extended screenshot and instrumentation test suites to support landscape devices
- Improved the maintainability of an internal Terminal SDK testing app by migrating screens from XML layouts to Jetpack Compose

Skills: Kotlin, Android, Paparazzi, Android Studio, Gradle

Software Engineering Intern, Infrastructure
Neuralink
📅 Jan 2023 – Mar 2023   📍 Fremont, California

- Improved pain points in deploying internal services by developing a Helm Chart for templating Kubernetes deployments
- Developed a GitLab CI pipeline to standardize the process of getting code to production
- Migrated internal services and onboarded engineers to the new deployment Helm Chart and CI pipeline
- Merged a new node to Neuralink's Kubernetes GPU cluster, doubling CPU and GPU resources for model training needs.
- Provisioned servers as nodes for a new Kubernetes production cluster to be used as Neuralink's production compute environment

Skills: Kubernetes, Helm, Terraform, Docker, Canonical MAAS, Gitlab CI

Software Engineering Intern, Deploy
Stripe
📅 Jun 2022 – Sept 2022   📍 Seattle, Washington

- Implemented an automated data pipeline for a metrics dashboard to provide visibility into the usage of infrastructure locks
- Conducted user interviews with a manager and several engineers to understand the pain points of incident response
- Developed and shipped a tool that improves incident response by surfacing commonly created locks as an intern hackathon project which was selected by our CTO to be presented to Stripe's co-founders and 1.7k Stripes during a company-wide meeting
- Integrated infrastructure locks with an automated host cycling tool, allowing the system to be easily disabled during incidents

Skills: Go, gRPC, Protocol Buffers, Ruby, Sorbet, Mocha, Apache Airflow, Apache Parquet, Trino, Python, Typescript, React, Bazel

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Software Engineering Intern
SiriusXM Connected Vehicle Services
📅 Jun 2021 – Aug 2021   📍 Remote

- Developed a support Slack bot using NLP to assist 160+ engineers with resolving API issues, reducing load on support engineers
- Implemented a user friendly UI that displays key information from SiriusXM APIs to aid engineers in their debugging process, eliminating the need to make manual requests to APIs

Skills: AWS/Serverless Framework (Lambda, DynamoDB, Amplify), Slack API (Bolt), React, Python, Jira, BitBucket, Jenkins

Software Engineer
HarvestHaul
📅 Jul 2021 – Sep 2022   📍 San Francisco Bay Area

- Developed a web-based admin portal used by vendors to manage their inventory
- Implemented backend API routes powering our mobile app and admin portal for customer orders, coupons, account authentication/management, and inventory management
- Developed complete test suite for backend code
- Provisioned CI/CD pipelines for staging and production environments
- Incubated at the Harvard Innovation Labs (Venture Program)

Skills: Amazon Cognito, AWS Lambda, Amazon Dynamodb, Serverless Framework, Python, pytest, React

ACTIVITIES

Engineering Manager / Full Stack Developer
Triton Software Engineering
📅 Nov 2020 – Present   📍 La Jolla, California

- Managing the development of an internal tool for Union Station Homeless Services, a non-profit organization committed to helping homeless individuals and families rebuild their lives.
- Developed web applications for various non-profit organizations in an Agile environment using the MERN software stack

Projects
- A foster dog matching portal for The Animal Pad
- A new member recruitment and roster management tool for the club to organize member profiles and their projects
- A mobile app promoting family literacy for Words Alive
- A web app for Feeding San Diego that helps track current food supply

Skills: MongoDB, Express, React, Node.js, Go, React Native + Expo, Typescript, Firebase, Figma, Git

PROJECTS

golinks – go/links for your personal setup

gomachine – A very basic virtual machine with a custom instruction set and assembler

notif – Programmatically send push notifications to your phone

jufa – A mobile app for virtually connecting with new people in a stay-at-home world built with Expo, Express, and Apollo

ideaHunt – A mobile app to freely share ideas and projects with a community built with Expo and Python/Flask

Drawma – A multiplayer drawing game where each player contributes a piece of an image built with React and Firebase

uWeb (microWeb) – Web server for wifi-based micro-controllers running MicroPython featuring URL routing, HTTP request parsing, HTML template rendering, and static file serving

uPixels – RGB LED strip controller built with uWeb for MicroPython micro-controllers accessible via a REST API and a web interface

DatStreamer – Desktop application for streaming music from DatPiff.com written in Java using JavaFX and jsoup

libsonyapi – Python binding for the Sony Camera API that interfaces directly with a Sony camera via SSDP and HTTP

pylapse – Python time-lapse shooter built using libsonyapi and tkinter for Sony cameras with automatic capture timing