Phillip **Duncan**

PRODUCTION ENGINEER · SYSTEMS ENGINEER

Seattle, Washington

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ReadMe

I am an accomplished Production Engineer with 10+ years of experience in Linux Systems Engineering, CI/CD Framework development, Python, and Server configuration and provisioning. I take on projects to improve existing pipelines and applications, as well as architect and implement solutions from scratch. I am adept at collaborating with cross-functional teams to ensure performance, scalability, and reliability of build and test pipelines, applications, and infrastructure.

JobLog

Meta, Inc   *Remote/Seattle, Washington*
PRODUCTION ENGINEER - DEVELOPER PLATFORM   *May '22 - January '23*

- Lead efforts and prototyped process to reduce cycle time for new build platforms by 50
- Managed Bazel based build platform configs for versioning Clang, GCC, and LLVM for 1,000+ internal project repositories
- Mentored newly promoted engineer on the team for technical and career growth at new level

Meta, Inc   *Remote/Seattle, Washington*
PRODUCTION ENGINEERING MANAGER – BLOB STORAGE   *April '20 - May '22*

- Managed team of engineers building new version of Meta's BLOB Storage service API
- Hired 3 new engineers remotely on the team, both new hire and internal transfers
- Mentored engineers on career growth and development
- Lead team in developing OKR objectives and goals on a quarterly basis
- Lead Reliability Program efforts, improving On-Call experience by focusing efforts on reducing alarm noise. Also lead efforts in defining new Service SLOs and SLAs for new BLOB Service
- Due to supply chain capacity constraints, helped the team pivot towards efficiency in new service to keep service adoption plans on track

Facebook, Inc   *Seattle, Washington*
PRODUCTION ENGINEER - LINUX CONTAINERS TEAM   *November '18 - April '20*

- Owned and improved the Linux Container Image build system
- Build system integrated with service containers, based on CPIO and RPM for the base OS
- Helped define Core Container OS, as well as a new build and distribution system
- Lead migration of infra services to new version of our container execution using cgroupv2
- Setup migration automation, monitoring, and tracking for services
- Developed performance tests to avoid regressions during migrations

Facebook, Inc   *Menlo Park, CA*
PRODUCTION ENGINEER - LINUX KERNEL TEAM   *September '14 - November '18*

- Designed, implemented, and adopted new build and test infrastructure for the Linux Kernel
- Migrated build system off Jenkins to internal build with Phabricator support, providing auditable changes from upstream Linux Kernel development
- Created a new continuous build pipeline for the Kernel in Python and PHP
- Integrated Build pipeline into Production Release pipelines with a custom Job engine and Chef for configuration management
- Generalized Python Test Framework to be used by other teams in Infra
- Designed and implemented an Asset Reservation System for low level systems testing
- Allowed for use of test hardware distributed across multiple platforms and locations to be shared amongst dozens of engineers and automated test services without conflict
- Asset reservation scheduler supporting both ad-hoc and automated build tests, Python and MySQL with a CLI and PHP front end
- Generalized reservation service with Thrift API to support multiple team adoption
- Mentored junior engineers, interns, and bootcampers

Facebook, Inc
Palo Alto, CA & Dublin, Ireland

SUSTAINING LINUX SYSTEMS ENGINEER
February '11 - September '14

- Developed Test Framework to provision and test new hardware, both internally and with external vendors, collecting metrics for hardware evaluation
- Configured and automated provisioning for Facebook's server fleet across data centers
- Worked with external vendors and internal Data Center engineers to test and address sustaining Hardware issues and implement tooling and automation to resolve issues
- Automated firmware and system software upgrades during provisioning across the server fleet
- Developed tooling to monitor systems, collect data, and develop maintenance methodologies

Facebook, Inc
Palo Alto, CA

SITE RELIABILITY OPERATIONS ENGINEER
June, '10 - February '11

- Handled provisioning systems, ensuring proper capacity needs are met
- Handle site events, documentation, escalation, and resolution
- Automated alert actions and automated alarms
- Performed standard systems and website troubleshooting - diagnosed troubles detected by our systems and work quickly to resolve issues and mitigate risk

Godaddy.com Software Inc
Gilbert, AZ

HOSTING OPERATIONS LINUX SYSTEMS ADMINISTRATION
June '09 - June '10

- Provided shift coverage and on-call coverage for administrative tasks on the systems, frequently working with other departments to resolve major issues
- Automated provisioning of new systems including high availability 'Grid' mini cluster servers
- Developed and automated internal provisioning systems
- Documented procedural steps for systematic mass deployments to the environment, as well as fulfilling requests for additional servers, including configuration of production servers and application servers and performing investigations on issues occurring within the environment

Godaddy.com Software Inc
Scottsdale, AZ

VARIOUS
June '06 - June '09

- Advanced Hosting Support Shift Manager
- Hosting Support Team Lead
- Server Support Representative

Software Development ──────

Systems Engineering ──────

Programming Languages

Bash, Python, Golang, Rust, C++

Platforms & Frameworks

LLVM/Clang, Linux, Linux Containers, AWS, Docker, Phabricator, Git, Mercurial, Jenkins, Chef