Fernando Álvarez

Software Engineer

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ABSTRACT

I'm a master degree IT professional mainly focused on software engineering with a deep background in backend systems, operations and automation, being interested also in distributed systems, scalable databases and open source software. I enjoy clean, documented and tested code, and keep reading and learning about new technologies. I'm passionate about what I do and can work readily either alone or within a team, having wide experience working remotely within a distributed team. I don't fear of talking in public or taking responsibilities, as I consider myself to have good leadership skills. I'm also able to provide advanced technical support and mentorship.

WORK EXPERIENCE

Basecamp (Valencia, Spain — Remote)

Senior System Administrator, Nov 2020 - Present

- ▸ Cloud and database operations for Basecamp products and HEY.com

BeBanjo (Madrid, Spain — Remote)

Infrastructure Lead, May 2017 - Nov 2020

Site Reliability Engineer, Oct 2015 - Apr 2017

- ▸ Lead Infrastructure team, manage weekly work, plan roadmap and set a mid- and long-term vision
- ▸ Provision a multi-environment, AWS-based, reproducible infrastructure and applications configuration with Chef and Terraform
- ▸ Administration and provisioning of application databases based on MySQL in AWS RDS
- ▸ Top to bottom administration of in-house Elasticsearch clusters, plus implementation of internal tooling written in Go
- ▸ Management and scaling of background processing mechanism based on Sidekiq and Redis
- ▸ Set full monitoring and layered alerting policy using StatsD, Librato, Slack, PagerDuty, and internal tooling
- ▸ Introduce full logging and time-series stack using syslog-ng + Redis + ELK
- ▸ Implement from scratch new CI system based on Buildkite, Kubernetes and Docker, hosted in Google Cloud
- ▸ Provision load balancing with failover using HAProxy and EC2 Autoscaling groups
- ▸ Plan next-gen internal monitoring system using Prometheus and Graphana
- ▸ Join a regular on-call and support rotation
- ▸ Take active part of internal hiring processes

Locafox GmbH (Berlin, Germany)

Software Engineer, May 2015 - Oct 2015

- ▸ Design, implement and document new key backend components, mostly written in Go
- ▸ Build automation and deployment solutions with Jenkins and Docker, using AWS as infrastructure
- ▸ Lead development and maintenance of data importer, written in Go, and using PostgreSQL and Elastic Search as persistence tools
- ▸ Take active part of the on-boarding process of new retailers in the platform
- ▸ Teaching and mentoring of coworkers into Go development
- ▸ Coordinate and collaborate with external teams on outsourced software projects
- ▸ Take active part on code reviews and deployment iterations

cloudControl GmbH (Berlin, Germany)

Software Engineer and Operations, August 2012 - May 2015

- ▸ Implementation of software services, components and REST APIs in multiples languages and frameworks: Python, Django, Java, Ruby, Sinatra, PHP, Go
- ▸ Administration of production MySQL databases
- ▸ Management and orchestration of an underlying infrastructure based on Amazon AWS and Google Compute Engine using tools like Opscode, Chef, Hubot or in-house bootstrap scripts
- ▸ Monitor platform health using services like Pingdom, New Relic, Serverdensity or Logentries
- ▸ Heavy use of Git as VCS, branch-based features development and code reviews via Pull Requests
- ▸ Maintenance of several open source projects like cloudControl's Python CLI, Python or Go API libraries, port CLI to dotCloud
- ▸ Implementation and scaling of load balancers routing layers, based on nginx, Varnish, Redis and WebSockets
- ▸ Handle load of logs using MongoDB and rsyslog
- ▸ Integrate internal components' deployment with CI services like Jenkins or TravisCI
- ▸ Write technical and non-technical platform documentation and sample apps in multiple languages
- ▸ Bootstrap dotCloud PaaS from scratch to +2000 users based on the already existing cloudControl PaaS
- ▸ Provide technical support to existing customers
- ▸ Join a regular on-call schedule using PagerDuty

Repsol S.A. (Madrid, Spain)

Software Engineer Intern on Refining Dept., October 2011 - March 2012

- ▸ Be involved on big projects between Repsol and third party contractors
- ▸ Analysis of incoming data from refining stations using SQL
- ▸ Learn about software engineering and management within a big corporation
- ▸ Take part of an official course about leadership

Consorcio Regional de Transportes (**Public Company**) (Madrid, Spain)

Technical Intern on Commercial Dept., July 2011 - September 2011

- ▸ Data analysis using Visual Basic for Applications

EDUCATION

Universitat Oberta de Catalunya (Online)

Cities and Urbanism Master Degree, 2019 - Present

Universidad Complutense de Madrid (Madrid, Spain)

IT Engineer Master Degree, 2004 - 2012

Philipps-Universität Marburg (Marburg, Germany)

Computer Science Erasmus Student, 2009 - 2010

TECHNICAL SKILLS

Programming languages:

- ▸ Advanced level: Go, Ruby, Python, Bash
- ▸ Intemediate level: Java, PHP, JavaScript, C
- ▸ Amateur level: C++, Haskell, Scala, Erlang

Git

Operating Systems: Unix systems, Ubuntu, Debian, containerized environments

Databases: *SQL, AWS RDS, Elasticsearch, Redis, Memcached

Infrastructure:

- AWS: EKS, EC2, ECS, Route53, S3, RDS, CloudWatch, SNS/SQS
- Google Cloud Platform: Compute, GKE, Docker Registry, Storage, SQL

Continuous Integration/Deployment: Buildkite, Jenkins, TravisCI, drone.io, Coveralls

HTTP: HAProxy, Apache2, Phusion Passenger, nginx, nginx-lua, Varnish, Pound, Hipache, WebSocket, SSL/TLS

Ops: Docker, Kubernetes, LXC, SystemD, Supervisord, Chef, Terraform, Hubot, ssh, scp, DNS, Vagrant, cron, OpenVPN

Monitoring: ELK, Pingdom, StatsD, Librato, Prometheus, New Relic, Serverdensity, Logentries, Pager-Duty

Documentation: Markdown, Google Docs

Software Engineering: Agile methodologies, TDD/BDD, Kanban, Shape Up, Scrum, Extreme Programming, Software Craftsmanship

OPEN SOURCE

oscillatingworks: Personal, independent open source organization - https://www.oscillating.works

piladb: Lightweight RESTful database engine based on stack data structures - https://www.piladb.org

esnap: Opinionated tool to manage take and restore of Elasticsearch snapshots - https://github.com/bebanjo/esnap

cctrl: cloudControl command line utilities - https://github.com/cloudControl/cctrl/commits/master?author=fern4lvarez

gocclib: Go library for the cloudControl API - https://github.com/fern4lvarez/gocclib

goduckgo: Go package for DuckDuckGo API - https://github.com/ajanicij/goduckgo

gs3pload: Upload files to multiple S3 or Google Storage buckets at once - https://github.com/fern4lvarez/gs3pload

documentation: cloudControl PaaS documentation in GFM - https://github.com/cloudControl/documentation/commits/master?author=fern4lvarez

LANGUAGES

Spanish: Native language
English: Full professional proficency
German: Intermediate proficency