

Tiago Teodósio

Computer Engineer

AREAS OF EXPERTISE

Systems Integration
Software Development
Infrastructure Management
Linux System Administration
Network Administration
Application Management
Open Source

EDUCATION

MSc in Electrical and Computer Engineering
Instituto Superior Técnico
Lisbon University 2002 - 2007

PERSONAL SKILLS

Perseverance
Attention to detail
Calm under pressure

LANGUAGES

Portuguese (native)
English (good)
Spanish (medium)
French (medium)
German (medium)

PERSONAL DETAILS

Full name: Tiago Teresa Teodósio
Location: Berlin, Germany
Phone: [+49 176 2119 3852](tel:+4917621193852)
Email: ttt@ist.utl.pt
Web: web.ist.utl.pt/ttt
GitHub: github.com/TiagoTT

PERSONAL SUMMARY

A computer engineer with broad experience in design, development and operation of information systems. Knows how to match available technology with business requirements. Able to troubleshoot complex systems in order to find and fix the root cause of the problem, from error analysis in higher level applications, to lower level network or operating system debug, promptly escalating issues when necessary. Cares a lot about project documentation. Understands software development work-flows as well as system operation work-flows and can provide solutions to improve the reliability of systems and applications. Wishes to learn continuously and to contribute to the overall team success.

KEY SKILLS AND COMPETENCIES

- Analysis, design, implementation and operation of applications and network systems
- UNIX-like operating system understanding, specially Linux
- Infrastructure and application deployment
- TCP/IP network stack understanding
- HTTP, DNS and SMTP protocol knowledge
- Knowledge of relational and non-relational databases
- Knowledge of virtualization and containerization technologies

WORK EXPERIENCE

Brandwatch - www.brandwatch.com - Social Media Monitoring (Berlin, Germany)
Principal Systems Engineer October 2023 – Present **(full-time)**

Engineering and maintenance of several infrastructure components that support the operation of the main company services in private data centers and cloud providers.

- Physical infrastructure management. Hardware life cycle management.
- Deployment and management of on-premises Kubernetes clusters.
- Setup of KVM hypervisors and VM provisioning managed with The Foreman.
- Implementation of encrypted off-site backups.

Technologies: Linux, Puppet, Kubernetes

Sony Interactive Entertainment - www.sie.com - PlayStation (Berlin, Germany)
Service Reliability Engineer September 2022 – September 2023 **(full-time)**

Engineering and maintenance of several infrastructure components that support the operation of the main company services in private data centers and cloud providers.

- On-call duty to ensure SLA of customer facing services, troubleshooting problems at all levels of the technology stack and escalating to the relevant teams when required.
- Maintenance of infrastructure used by Data Engineering and Business Intelligence

Technologies: Linux, Kubernetes, Elasticsearch, OpenSearch, Kafka

Zendesk - www.zendesk.com - Customer Support Platform (Berlin, Germany)
Senior Operations Engineer February 2022 - August 2022 **(full-time)**

Engineering and maintenance of the private and public DNS infrastructure.

Technologies: Python, AWS Route53, Ruby, Terraform

Brandwatch - www.brandwatch.com - Social Media Monitoring (Berlin, Germany)
Systems Engineer August 2016 – January 2022 **(full-time)**

Engineering and maintenance of several infrastructure components that support the operation of the main company services in private data centers and cloud providers.

- On-call duty to ensure SLA of customer facing services, troubleshooting problems at

all levels of the technology stack and escalating to the relevant teams when required.

- Data center DNS migration from BIND to PowerDNS.
- Maintenance of NGINX load balancers.
- Setup and maintenance of Redis clusters.
- Setup of TCP load balancers using Haproxy and Linux Virtual Server.
- Maintenance of Postfix email relays.
- Setup of KVM hypervisors and VM provisioning managed with The Foreman.
- Setup of public DNS using external providers to ensure low latency worldwide.
- Setup of secondary HTTPS data streams collection and archive.
- Deployment and management of on-premises Kubernetes clusters.

Technologies: Linux, Puppet, Kubernetes, NGINX, HAProxy, Redis, PowerDNS

Rocket-Internet - www.rocket-internet.com - Start-up Incubator (Berlin, Germany)
Systems Engineer June 2015 – July 2016 **(full-time)**

Fast cloud infrastructure deployment for new child companies, making use of many internal Puppet modules and contributing to their improvement. Implementation of simple packaging and deployment tool for web applications based on Jenkins.

Technologies: AWS, Puppet, Hiera+eYAML, Jenkins, NGINX, PostgreSQL, Redis

SAPO - www.sapo.pt - Web Portal (Lisbon, Portugal)

Software/Systems Engineer March 2010 - May 2015 **(full-time)**

Software development, web stack system engineering, systems integration, database management and system operation for the following projects:

- Vivo Twittando - Twitter gateway for SMS mobile clients, with up to 30k active users and 100k daily messages. Joined the project 3 months after it went live in production and took all technical responsibility, working as a full-stack engineer with the duties to maintain all project components and oversee production operation.

Technologies: Debian Linux, Apache, MySQL, Memcache, Python, Ruby-on-Rails, PHP, DEB packaging.

- Pond - social content aggregation, cache and normalization, with up to 10k active users. As a member of a team of 8 developers, worked on the backend connections to Facebook and Twitter APIs to fetch and publish content, adding features and fixing bugs, performed database performance tuning and SQL query optimization.

Technologies: Debian Linux, Apache, MySQL, Perl

- Intranet - Being part of the intranet development team, producing a web application for internal user and project management, focusing especially on centralized control for **account and access provisioning** on several other systems, such as, **code repositories, wiki servers, ticketing systems, mailing lists, file shares.**

Technologies: Python, Django, CherryPy, pyWin32 API

Additionally giving support to internal development procedures by managing and customizing several applications to meet the work-flows of several teams. Adding **Single Sign On integration** and other changes to some applications in order to meet company policies, namely **GitLab, Phabricator, Etherpad, Prosody**. Managing **Trac** deployments, helping development teams to implement their work-flows. Supporting code-review and continuous integration work-flows.

Technologies: Python, PHP, Ruby, Bash Shell Script, Shibboleth

Managing intranet infrastructure based on two LXC host servers, two reverse-proxies servers running Apache and Shibboleth authentication daemons, and two database servers running MySQL in master-slave replication mode.

Technologies: LXC Linux Containers, Apache, Shibboleth, MySQL, SSH, rsync, Postfix, qmail, Bash Shell Script

bonito.pt - github.com/TiagoTT/bonito.pt - Internet (Lisbon, Portugal)

Author April 2013 - June 2013 **(hobby)**

Conception, design, implementation and operation (no longer active) of an email forwarding system, providing email aliases under the domain bonito.pt.

Technologies: C, Bash Shell Script, PL/pgSQL, Debian Linux, NGINX, Postfix,

PostgreSQL, SMTP and HTTP protocols

Truewind-Chiron - www.truewind-chiron.com - IT Consulting (Lisbon, Portugal)
Systems Engineer October 2008 - September 2012 **(part-time)**

Design, setup and management of a virtualized infrastructure to support software development, staging environments and customer support ticketing system. Fully responsible for a small infrastructure of 3 physical servers hosting about 20 virtual machines.

Technologies: Xen, Ubuntu and Fedora Linux, Windows 2003 and 2008 Servers, Samba-LDAP Domain, OpenVPN, Amanda backups, iptables NAT and firewall.

TMN - www.tmn.pt - Mobile Operator (Lisbon, Portugal)
Software Engineer October 2008 - December 2009 **(full-time)**

Analysis of project requirements, solution design and development of HTTP APIs to provide CRM features to other independent systems, such as IVRs.

Technologies: C, Informix 4GL, Oracle ProC, Informix SQL, Shell Script, Makefile, Solaris 9, WebSphere, HTTP protocol, CGI and FastCGI interfaces

Development of a client library for an HLR provisioning interface.

Technologies: C, SOAP, RPM packaging

Maintenance of critical alarmistic component used to send SMS notifications to operations team members.

Technologies: C, Shell Script, Makefile, UCP protocol

Chipidea MIPS-ABG - www.chipidea.com - Silicon Industry (Lisbon, Portugal)
CAD Engineer September 2007 - September 2008 **(full-time)**

Supporting design and validation tools for analog and mixed signal integrated circuits projects. Automation of tasks involving configuration file tweaking, running programs and program result validation for quality assurance.

Technologies: Python, tcsh Shell Script, CentOS Linux

RNL IST - www.rnl.ist.utl.pt - Education (Lisbon, Portugal)
System/Network Administrator May 2005 - November 2006 **(part-time)**

Preparing the Linux desktop image for deploy in computing classrooms, comprising 9 rooms with about 10 computers each, and managing Linux and Solaris servers as well as the network infrastructure of the building, as part of a team composed by of 5 other students with little supervision. Providing user support on scheduled periods.

Technologies: Linux Kernel, Perl, Bash Shell Scripting, Gentoo and Ubuntu Linux, Solaris 7 and 9, Apache, BIND, Postfix, PureFTPd, VLAN configuration, IP routing, iptables NAT and firewall, TCP/IP, LDAP, DNS, SSH, DHCP, HTTP, FTP protocols