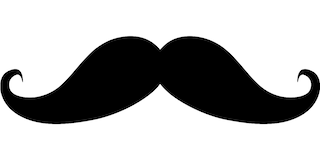
# Bertrand Tornil



## Software Engineer, PhD

*Wake Forest, NC 27587, USA*

[Email](mailto:bertrand.tornil@gmail.com) / [Website](https://www.tornil.net/) / [LinkedIn](https://www.linkedin.com/in/bertrandtornil/) / [GitHub](https://github.com/bobuss) / [Twitter](https://twitter.com/bobuss/)

I deliver available, scalable and observable web services.

My days are full of Ansible, MariaDB, Redis, Python, Orchestrator, Kafka, Azure, Prometheus, grafana, OpenTelemetry, Solr, JVM, shell, RedHat. I also use Terraform, Kubernetes, docker, Clickhouse, Consul, and many other cool tools… I am a frontend hobbyist, currently playing with vue.js and Audioworklet API. I used to be on-call, and I liked it!

### Skills

* WebService Architectures
* DevOps
* Open Source

## Professional Experience

### Principal Software Engineer

2016 - present

[Itron](https://www.itron.com/)

Remote, USA

* Technical swiss knife : SmartCities solution architecture
* [StreetLight.Vision](https://www.itron.com/na/solutions/what-we-enable/smart-cities/central-management-software)
* Duties and Accomplishments:
  + Implemented architecture for High Availability in both On-Premise and Cloud environments.
  + Selected and integrated new tools and open-source software, including Git, Prometheus, Grafana, Kafka, Redis, and orchestrator.
  + Established MariaDB High Availability with a 10-second failover using Orchestrator, HAProxy, and Consul.
  + Automated tasks using Ansible.
  + Led the transition to Azure DevOps Services, configuring Infrastructure as a Service (IAAS) and setting up pipelines for builds and deployments.
  + Utilized Kubernetes and Terraform for deployment and management.
  + Designed and implemented a comprehensive Monitoring and Alerting stack.
  + Advocated for DevOps principles, promoting Continuous Integration and Continuous Deployment.
  + Stayed up-to-date with the latest technological advancements through regular technological watch and research.

### Data Scientist, Web architect, Lead Dev, Release Manager

2009 - 2016

[IsCool Entertainment - Paris](https://www.iscoolentertainment.com)

Paris, France

* 2015 - 2016 : Data Scientist
  + Postgresql, w/ PipelineDB, CitusDB
  + InfluxDB
  + Google BigQuery
  + Kubernetes
* 2013 - 2015 : Lead Dev on [Lord of the Dumbs](https://www.lordofthedumbs.com/fr/)
  + Python (Pyramid, SQLAlchemy, uWSGI, supervisord, Fabric)
  + postgresql, redis
  + RabbitMQ
  + RESTful webservices
  + AngularJS
* 2012 : R&D Transversal Projects:
  + RealTime dashboards (node.js / mongodb / html5)
  + QA and Continuous Delivery Processes and Tools (Jenkins, Tests, Capistrano, Monitoring)
* 2011 : Lead Dev & Release Manager on ColorParty: (up to 150,000 Monthly Active Users)
  + Shoots engine: 3Mshoots / day
  + Players Logbook Consolidation in best-effort
  + Business metrics, Users profiles, Messaging on Redis
* 2009 - 2010 : Lead Dev & Release Manager on IsCool: 1,500,000 Monthly Active Users, 80M Pages / day
  + Tokens sharing engine: still in production, 2G daily shared points
  + Redis deployment
  + Symfony2 Transition (see [Iscool Story. Symfony Live 2011 - Paris](https://fr.slideshare.net/bertrandtornil/symfony-live-2011))
  + Release process
  + SVN to GIT Transition
  + Makefiles (assets compilation, i18n)
  + Capistrano, EC2, S3
* Development architecture on EC2
* Agile: scrum (certified), kanban and XP notions
* DevOps: 1 release per day, Monitoring via Pinba and Zabbix
* Management: 10-20 persons team, hiring, trainees

### Core Developper

2009 - 2008

[Dailymotion - Paris](https://www.dailymotion.com)

Paris, France

* PHP / Mysql / memcache / git
* Localization
* Revenue sharing (ads servers)
* audio & video fingerprinting and videos publication process

### Web consultant

2007 - 2008

[ALTEN - Boulogne Billancourt](https://www.alten.fr)

Paris, France

* PHP, Mysql, Javascript
* Web Developpment: [Virgin Mobile](https://www.virginmobile.fr)
* R&D: [Cellfish media](https://www.cellfishmedia.fr) (Lagardère Active)
* Web Developpment: [caradisiac.com](https://www.caradisiac.com)

### R&D engineer

2006

UIXPERTS - Paris

Remote, France

* PHP, Mysql, Javascript

### Web Developper

2006

[WS Interactive - Toulouse](https://www.ws-interactive.fr)

Toulouse France

* PHP, Mysql, Javascript

## Education

### PhD in Information Systems (Doctorat d’informatique)

2006

Université Toulouse III – Paul Sabatier - France

Thesis (french): [Interaction gestuelle et haptique, pour plus d’utilisabilité et d’accessibilité](https://www.tornil.net/these)

### Master of Science in Computer Information Systems (Master Image & Language)

2001

Université Toulouse III – Paul Sabatier - France

### Bachelor of Science in Computer Science (Licence et Maitrise d’informatique)

1999

Université de Limoges - France

## Research Experience

### Graduate Research Assistant

2000 - 2006

[IRIT & Université Paul Sabatier - Toulouse](https://www.irit.fr)

Toulouse, France

* Search domains: HCI, Tactile and force feedback Interfaces, AI
* Teaching: CAML, C, Pascal, Delphi, Algorithms
* [Publications](https://tornil.net/bibliography)

## Teaching Experience

### AWS, scalability and DevOps (french)

2013 - 2016

[INSSET, Master Cloud Computing](http://apache.insset.u-picardie.fr/formations/master-informatique/master-ccm)

Saint-Quentin, France

* [AWS, scalability and DevOps (french)](https://www.tornil.net/INSSET_AWS/index.html)

### Cloud et architectures scalables (french)

2011

[EPITA](https://www.epita.fr)

Paris, France

* [Cloud et architectures scalables (french)](https://www.tornil.net/epita/epita2011.html)

## Selected Publications

### Iscool Story

2011

Symfony Live

Paris, France

Alexandre Rodière, **Bertrand Tornil**

* [slideshare.net/bertrandtornil/symfony-live-2011](https://fr.slideshare.net/bertrandtornil/symfony-live-2011)

### Music haptic: Musical harmony notions for all with a force feedback mouse and a spatial representation

2005

International Computer Music Conference

Barcelona, Spain

**Bertrand Tornil**, Nadine Baptiste-Jessel

* [Music haptic: Musical harmony notions for all with a force feedback mouse and a spatial representation](https://www.tornil.net/bibliography/icmc2005/index.html)

### Use of force feedback pointing devices for blind users

2004

8th ERCIM Workshop User Interfaces For All

Vienna, Austria

**Bertrand Tornil**, Nadine Baptiste-Jessel

* [Use of force feedback pointing devices for blind users](https://www.tornil.net/bibliography/ui4all2004/index.html)