

# Aurélien Hervé

# PhD, expert cloud engineer & distributed systems architect

# Experience

2019-today Staff Engineer, Aircall, Paris.

The phone system for modern business

- Architecture & implementation of a real-time, distributed data-platform with AWS, terraform, lambda, kinesis, dynamoDB, golang ...
- Design & implementation of distributed algorithms to scale existing features
- Setting up a data governance to empower all teams (data security, robustness, availability, documentation...)

#### 2015–2019 **CTO**, *Hunteed*, Paris.

Hunteed is a digital recruitement marketplace. I Designed & implemented the whole solution from scratch:

- Data-modeling
- Real-time Infrastructure & devOps with AWS, Docker, CodeShip . . .
- 4 angular webapps
- 1 node-express api (written in typescript)
- Design & implementation of Hunteed's recommendation engine
- o Design & implementation of Hunteed's CRM engine
- Advanced data analytics

#### 2014–2015 CTO, cofounder, Shapter, Paris.

Shapter used to help students to choose their studies thanks to alumni feedbacks and an innovative recommendation engine

I rewrote from scratch the backend and devOps:

- Design & implementation of a Ruby-on-Rails api from scratch
- Data-modeling
- o Design & implementation of a real-time recommendation engine
- DevOps

#### 2012–2014 **Head of R&D**, *adomik*, Paris.

I bootstraped the very first algorithms and big data infrastructure of adomik

- Hadoop-stream (using ruby-written algorithms)
- Data visualization with Ruby on Rails
- Big data infrastructure design and creation (using AWS hadoop, dynamodb, redshift, ec2...etc)

### Formation

- 2012 PhD in fundamental fluid mechanics, Ecole Polytechnique / ONERA, Paris.
- 2009 Master of engineering, ISAE ENSMA, Poitiers.
- 2009 Master of research in fluid dynamics, Université de Poitiers, Poitiers.
- 2004–2006 Classe préparatoires MP, Lycée Charlemagne, Paris.
  - 2004 Baccalauréat Série S, Lycée Charlemagne, Paris.

### Skills

languages go, terraform, Typescript, ruby, javascript, fortran

[big]data **real-time distributed systems**, **map/reduce algorithm design**, Hadoop, data-modeling, spectral clustering

infra/DevOps AWS, Docker, terraform

dataStores **DynamoDB**, mongoDB, redis

web node, express, angular, ruby-on-rails

# Publication & open-source projects of interest

research **PhD Thesis**, Contrôle optimal en boucle fermée d'instabilités hydrodynamiques par identification de modèles réduits .

**JFM Publication**, *A physics-based approach to flow control using system identification* ☑.

blog hackernoon publications, medium.com/@aherve.

- Having Fun With Functional Programming
- o Basic javascript algorithms toolbox: starter kit ☑
- How we happily dockerized our development environment
- Bro, do you even map?—MapReduce demystified
- Installing git hooks in a dockerized environment

### github open source projects, github.com/aherve.

- o giflichess: turn your chess game into an animated gif 2
- o docker-nodemon: a light dockerized dev environment to work with docker & typescript 🗗
- o typescript-express-docker: boostrap your node-express-typescript api 

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- o ngx-compact-number: angular lib to display numbers in a compact way

# Languages

French native
English fluent

#### Hobbies

Music, chess, windsurf, fencing...