## Curriculum Vitæ

# Yann Esposito Expert en Machine Learning

Yann Esposito

December 20, 2011

# Yann Esposito

mail	yann.esposito@gmail.com
port	(+33)650845271
address	Bât K <sub>4</sub> , Les Pugets
	101, rue Jean Giono
	06700, Saint Laurent du Var

## **Professional Background**

$2010$ $\rightarrow$	Co-Founder of GridPocket,
2007→	AirFrance,
10/2006 -> 3/2007	Post Ph.D., Hubert Curien Laboratory,
10/2004-9/2006	ATER (College Degree Teach & Research),
10/2001 -> 9/2004	University Monitor (College Degree Teach & Research),
1995→2000	Miscellaneous summer jobs

## Education

Ι

2004	CS Ph.D. in Machine Learning at Université de Provence
200I	D.E.A. (Equivalent to Master in Computer science)
2000	Maîtrise in Computer Science
1999	Licence in Computer Science
1998	DEUG MIAS (Math)
1995	BAC S (Math)

## **Research Activies: Publications**

International Journal	[Fundamenta Informaticæ, 2008]
	[PatternRecognition,2004]
Internation Conferences	[ECML 2008] [ICGI 2006] [COLT 2006]
	[COLT 2004] [ICALP 2003] [ICGI 2002]
National Journal	[JEDAI 2002]
National Conferences	[CAp'06] [CAp'04] [CAp'03]

## Things done

• YPassword iPhone application

2

- Gridpocket web services (from conception to realization, works in correlation with a mobile app)
- DEES: a 10.000 line C++ command line program. This program implement most HMM standard algorithms & inference algorithms.
- SeDiL: a Java application using Swing UI. The goal is to provide biologist an easy way to use an algorithm that generate Similarity Matrices for strings but also for Tree structures. Most graphics was done by me, including the drawing of trees. I didn't used a library for that purpose.
- For YPassword; a Dashboard Widget, a web interface, a command line tool.
- Some websites: yannesposito.com, ypassword.espozito.com
- Written a thesis in Machine Learning and published in major international conferences: [ICALP2003], [COLT2004] & [COLT2006].
- A full javascript web application which display Electric consumption in real time.
- krambook (the engine I use to create this document. I exported it in HTML, PDF (using \( \text{LT}(X) \) and SVG.
- some Mac OS X screensaver, a MetaPost plugin to draw Automata, an RFC-like document to help my student to make a TOR like network, etc...

## Technical Competences

Mac Objective-C Cocoa (Mac & iOS), Dahsboard widget, Quartz Composer

Mainstream Languages Javascript, C++, Ruby, Perl, Java, Python, PHP

Languages Haskell, scheme, C, camL

Unix Shell scripts (zsh, bash), awk, LATEX, ConTeXt, metapost

IDE XCode, Unix environment (vim)

Data Mining Tools Entreprise Miner (SAS), weka, SVMlight

Version Control Tools git, Bazaar (DCVS), subversion (svn), CVS

**Programming environments** Mac OS X, Unix/Linux (Solaris, Ubuntu, Debian), WindowsXP

UI Cappuccino, jQuery, Java Swing, Cocoa

# 4 Jobs

### 4.1 Co-Founder & freelance for GridPocket 2010 ightarrow

Sophia Antipolis, France

Product Two API server (one for client, another for administration)

A private client side web application

An iPhone Application

Some Linux boxes to send data to the servers

A Linux driver

Role Full technical responsibilities

**Technical Keywords:** Ruby, REST, JSON, HTML, CSS, Javascript, AJAX, jQuery, Objective-C, ASIHTTPRequest, CorePlot, CoreData, C

## 4.2 AirFrance $2007 \rightarrow$

Consultant

**Role** In charge of the Airfrance CMS for their website.

**Technical Keywords** TeamSite, Perl, XML, XHTML, CSS, javascript, JSP, Unix (Solaris/Linux), Bazaar

Environnement Windows (Cygwin), Sun Solaris, Linux

## **4.3** Post Ph.D 10/2006 → 3/2007

Université Jean Monet, Laboratoire Hubert Curien, Saint-Etienne

Product SeDiL

Role Developer

Details

Java application: 11 000 lines with javadoc

Main functionalities

· learn edit matrices

- compute edit distances between trees or strings
- visualize trees or sequences (JAVA 2D)
- classification using K means
- Generate random tree couple from an edit distance matrice

Web: http://labh-curien.univ-st-etienne.fr/SEDiL/

#### Research

Similarity measure between strings or XML trees

#### Contact Marc Sebban

**Technical Keywords** UML, Java 1.5, Swing, Java 2D, Java Web Start, Applet, subversion, XML, XHTML, PHP

Environnement Mac OS X, Linux (Debian), Windows XP

### 4.4 ATER 10/2004 -> 9/2006

Research & Teacher, Université de Provence, Marseille teach 1/2, research 1/6, C++ development 1/3 DEES; a C++ software

7500 lines of C++ code, 10.000 with comments Main functionalities:

- Mulitiplicity Automata, HMM & PDA Inference,
- Baum Welch & Viterbi Algorithms,
- · GraphViz export,
- String Generation from many Models,

Languages C++

API STL

Environment Linux (Debian) & Windows XP

### **4.5** Moniteur des Universités 10/2001 → 9/2004

Université de Provence, Marseille teach 1/3, research 1/3, C++ Development 1/3 Creation of DEES (see preceeding entry).

# Diploma

2004	CS Ph.D. degree in Machine Learning
2001	D.E.A. in Computer Science (equivalent to master)
2000	Maîtrise d'Informatique
1999	Licence in Computer Science
1998	DEUG MIAS (math)
1995	BAC S (math)

## 6 Scientific Publications

## International

Journals	[FundamentaInforamticævol.862008] [PatternRecognition,2004]
Conferences	[ECML2008] [COLT2006] [ICGI2006] [COLT2004] [ICALP2003] [ICGI2002]
Workshop	[TAGIo5]

## National (French)

Journals	[JEDAI,2003]
Conferences	[CAP2006] [CAP2004] [CAP2003]
Thesis	[UniversitédeProvence2004]

## **Projects**

Most of my latest programming activities are publicly available at github.com/yogsototh

#### 7.1 YPassword 2008 $\rightarrow$

Mainly an iOS application:

• YPassword, http://ypassword.espozito.com

I've done fully the website from scratch. Also there are some javascript implementation of YPassword tehcnic:

- · a Mac OS X dashboard widget,
- a Cappuccino Web application,
- a jQuery Web application,
- a command line tool,
- · an Applescript helper

#### 7.2 Rubyzome 2009 ightarrow

Ruby API oriented framework. Done with Luc Juggery. This framework is REST oriented and output can be either JSON (preferred), but also XML or HTML.

### 7.3 Anonymous Network Project 02/2006 $\rightarrow$ 06/2006

Made a protocol similar to TOR for student.

### 7.4 Other projects

Web Application used for private team usage at AirFrance 2008 →
 This application is just done for teh lulz. Not related to the Airfrance work.
 But still pleasant.

Javascript(Prototype.js, Scriptaculous), CSS, PHP/MySQL, Google Talk

- metapost package to draw Automata 2003 ightarrow 2004
- Mac OS X Screensavers 2003 → 2004 Objective-C, Quartz Composer, Cocoa

You could find even more information by looking at:

- My personnal website: http://yannesposito.com
- My github account: http://github.com/yogsototh