

Curriculum Vitæ

Yann Esposito

Expert en Machine Learning

Yann Esposito

December 20, 2011

mail	yann.esposito@gmail.com
port	(+33)650845271
address	Bât K4, Les Pugets 101, rue Jean Giono 06700, Saint Laurent du Var

Professional Background

2010→	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

2004	CS Ph.D. in Machine Learning at Université de Provence
2001	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

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

Softwares

GridPocket server architecture	API (Ruby/Rack/JSON/REST)
GridPocket Web Client	Full Javascript (jQuery) Web client
GridPocket iPhone app	(Objective-C/Cocoa) client
SEDiL	Learn Tree Edit Distances (Java/Swing)
DEES	Multiplicity Automata/HMM (C++/STL)

- An iOS app (YPassword)
- 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.esposito.com
- Written a thesis in Machine Learning and published in major international conferences:
[ICALP2003], [COLT2004] & [COLT2006].
- A private web service for GridPocket
- 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 \LaTeX) 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...

3 I tried many computer things

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

Object Orient Languages Ruby, Javascript, Perl, C++, Java, Python, PHP

Web Ajax (xmlHttpRequest, prototype.js, jQuery, scriptaculous...), XML, JSON
Ruby (nanoc), PHP/MySQL, Python (Django), REST, SOAP, XML-RPC

Norms HTML, XHTML, CSS, SVG

Libraries (API) C++(STL), Java (Swing/Java 2D), Python (PySQLite, wxPython, crypto, socket), Objective-C (Cocoa, iOS, Core Data, Quartz Composer, Core Plot, ASI HTTP Request)

Languages *haskell*, scheme, C, camL

Unix Shell scripts (zsh, bash), awk, L^AT_EX, ConTeXt, metapost

Conception methodology UML, Merise

IDE XCode, Environnement Unix (make, gcc,...)

Data Mining Tools Enterprise 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, scriptaculous, prototype.js, Java Swing, wxPython, Cocoa

Network protocols Ethernet, TCP/IP, UDP, FTP, DNS, DHCP

Network tools ifconfig, tcpdump, Wireshark (Ethereal), lsof...

Security bcrypt, scrypt, AES, DES, 3DES, Hamming, PGP, GPG...

Databases DataMapper (Ruby ORM), MySQL, PostgreSQL, SQLite

4.1 Co-Founder & freelance for GridPocket 2010 →

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 →

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, sub-version, 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:

- Multiplicity 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).

- *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 [TAGI05]

National (French)

Journals [JEDAI,2003]

Conferences [CAP2006] [CAP2004] [CAP2003]

Thesis [UniversitédeProvence2004]

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

YPassword 2008 →

Many different application to manage passwords. Mainly an iOS application:

- YPassword

But there is also:

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

Rubyzome 2009 →

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.

Anonymous Network Project 02/2006 → 06/2006

Made a protocol similar to TOR for student.

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 → 2004
%metapost
- Mac OS X Screensavers 2003 → 2004
Objective-C, Quartz Composer, Cocoa

You could find even more information by looking at:

- My personal website: <http://yannesposito.com>
- My github account: <http://github.com/yogsototh>