Gabriel Synnaeve

Ph.D student in Artificial Intelligence applied to Video Games
advised by Pierre Bessière (CNRS)

Education

2006–2009 **Engineering Degree, Master Degree**, *ENSIMAG (Grenoble INP), UJF*, Grenoble.
Computer Science and Applied Mathematics, spec. Artificial Intelligence

2004–2006 **College Level Preparative Classes**, *Lycée Saint-Louis*, Paris.
Physics, Chemistry, Engineering and Mathematics (PCSI-PSI)

2004 **A-Level**, *Lycée Jean Perrin*, Rezé (Nantes, 44), *Summa Cum Laude*.
Scientific section, option Engineering Sciences, option Mathematics

Experience

2009–present **Ph.D student (+ teaching assistant)**, *Grenoble University*, Grenoble/Paris.
Bayesian programming applied to video games (E-Motion team, INRIA)

2009 **Master thesis**, *National Institute of Informatics*, Tokyo.
Hypothesis finding for systems biology through inductive logic programming

summer 2009 **Software Development**, *Google Summer of Code*, The Apertium Project.
A prototype of multi-engine machine translation with Apertium and Moses (C++)

summer 2008 **Software Development**, *Probayes*, Grenoble.
A benchmark suite for ProBT, the probabilistic inference engine (Python/C++)

2007–2008 **Web Application Developer**, *NSIGMA*, Grenoble.
A social networking site: finlink.net (PHP)

Subjective selection of skills

Languages: English (fluent, TOEFL iBt 98/120 in 2007), German (basics)

Operating systems: Mac, GNU/Linux, Windows, Unixes

Tools: Git, Vim
Mercurial, gdb, gnuplot, scipy

Computer languages: C++, C, Python, learning Lisp
Java, Ada, Ruby, R

Machine learning: Bayesian models & models, ILP
ANN, SVM, NLP/MT

Publications

ILP 2009 (Poster) Kinetic Models for Logic-Based Hypothesis Finding in Metabolic Pathways, Gabriel Synnaeve, Andrei Doncescu, Katsumi Inoue

MaxEnt 2010 Modeling of a Human MMORPG Player, Gabriel Synnaeve, Pierre Bessière

TAAI 2010 A Bayesian Hybrid Approach to Unsupervised Time Series Discretization, Yoshitaka Kameya, Gabriel Synnaeve, Andrei Doncescu, Katsumi Inoue, Taisuke Sato

BIOSTEC Bioinformatics 2011 Kinetic Models and Qualitative Abstraction for Relational Learning in Systems Biology, Gabriel Synnaeve, Katsumi Inoue, Andrei Doncescu, Hidetomo Nabeshima, Yoshitaka Kameya, Masakazu Ishihata, Taisuke Sato (Best student paper award)

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