Félix Abecassis
65, rue de la Tombe-Issoire, 75014 Paris, France
Phone: 33 (0)6 67 43 81 28
felix.abecassis@gmail.com
22 years old
TOEIC: 975

MSc Student
High Performance Computing
felix.abecassis.me

E D U C A T I O N

2012-2013	• MSc in High Performance Computing (MIHP) at École Centrale de Paris and University of Versailles Saint-Quentin-en-Yvelines.
2007-2012	• Graduated from EPITA, French School of Computer Science and Advanced Technologies. Scientific computing and Image Processing major. Student-Researcher at the EPITA Research and Development Laboratory (LRDE).
2007	• Baccalauréat in Science, English intensive, with honours.

I N T E R N S H I P S

feb.-july 2012	• Internship at the LURPA laboratory of ENS Cachan. Development of an high performance machining simulation using C++, CUDA and OpenMP. Visualization of results in 3D with OpenGL.
sept.-jan. 2011	• Internship at AKAtech S.A. a computer vision company located in Switzerland. Contributions to the European research project ACTORS (Adaptivity and Control of Resources in Embedded Systems). Development of a JPEG codec in the CAL dataflow language and improvement of the IDE.
june-july 2009	• Internship at the LRDE, working on Spot, a Model Checking library written in C++. Research on Büchi automata for distributed computation of emptiness check.

P R O J E C T S

2012	• Technical report on parallelization and SSE vectorization of a generic image processing library. • GCC pass performing static analysis and dynamic instrumentation. • Optimized linear algebra library for dense and sparse matrices using CUDA and MPI.
2011	• Technical report on introducing parallelism in an educational compiler project and on the optimization of its register allocation pass. • Fast spell checker using a trie and the Damerau-Levenshtein distance. • Efficient Binary Decision Diagrams (BDD) library for model checking. • Detection and decoding of EAN barcodes in natural images.
2010	• Implementation of Transition-Based Generalized Büchi Automata (TGBA) minimization.
2009	• Development of a SUSv4 compliant shell. • Fast calculator for arbitrary long numbers.
2008-2009	• Project for automatic recognition of sheet music. Statistical classification using neural networks.
2007-2008	• Real time strategy game with OpenGL developed within the Fooo Team (fooo.fr).

T E C H N I C A L   S K I L L S

Tools :	• CUDA, OpenMP, MPI, TBB, SSE, OpenGL, OpenCV, Flex, Bison, Latex, ILOG CPLEX, Git, SVN.
Languages :	• C++, C, Java, Python (Numpy), Pascal (Delphi), ARM Assembly, Matlab, OCaml, Shell Script.
Other :	• Software Methodologies, Testing, Design Patterns, Distributed Algorithms, Numerical Stability.