

Guillaume Seguin

Curriculum Vitae

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Born 18th February 1989



Education

- 2012 – ... **Doctorant (Ph.D. student) in Computer Science**, *WILLOW Team, Inria/ENS Ulm*, Paris.
Ph.D. student in computer vision, supervised by Josef Sivic and Ivan Laptev. My work focuses on the use of 3D movies for various tasks such as person detection, pose estimation and segmentation.
- 2008 – 2012 **Élève Normalien**, *Computer Science Department of École normale supérieure*, Paris.
- September 2011 **Master (M.Sc.) in Computer Science**, *École normale supérieure*, Paris.
M.P.R.I. (Master Parisien de Recherche en Informatique), plus many classes from the M.V.A. master (Mathématiques, Vision et Apprentissage, ENS Cachan)
- September 2009 **License (B.Sc.) of Computer Science**, *Université Paris Diderot*, Paris.
- 2006 – 2008 **Classes préparatoires aux Grandes Écoles**, *Lycée Louis Thuillier*, Amiens.
- 2006 **Baccalauréat S (Scientific)**, *Lycée Sainte Famille*, Amiens.
With High Honors.

Experiences

- 2014 – ... **Consulting in Machine Learning and Computer Vision**.
Consultant for various companies (Keyrus, SolidWare, Reminiz) on topics related to Software Development, Machine Learning and Computer Vision.
Technologies : MATLAB, C, C++, Python, Amazon Web Services, Spark, JavaScript (node.js, angular.js)
- 2012 – ... **Co-maintainer of Printrun 3D printer host interface**.
Technologies : C, Python, wxWidgets
- April 2006 – ... **Member of Compiz window manager team (and previously Beryl/Compiz-Fusion teams)**.
Webmaster and sysadmin, handling the project web services (web sites, code repositories...).
Developer of various parts (multihead, dbus, some plugins) of the software.
Release manager.
Technologies : C, C++, Python, GTK+, Cairo, PHP, web technologies
- Autumn 2009 **Development of Cloudpy, a simple but scalable cloud computing system able to run arbitrary code or external binaries in a fault-tolerant manner** .
Technologies : Python
- Summer 2009 **Development of a multi-threaded discrete-time event simulator for use with ns-3 network simulator**, *INRIA Sophia-Antipolis Méditerranée*, Internship under the advisory of Mathieu Lacage.
Evaluation of various multi-threading related problems (synchronization, concurrent reference counting...)
Technologies : C++, Pthread
- Sprint 2009 **Member of the developpement of Cloudster, a clustering framework over the cloud**.
Using Microsoft®Windows®Azure™ cloud computing framework.
Applications for image clustering using Gist image feature extraction algorithm.
Produced as a project for a *software engineering* course. Technologies : C#, Windows®Azure™
- Winter 2008 **Development of a simple compiler for a fragment of OCaml**.
From parsing the source code to producing MIPS assembly, including a typing subsystem.
Produced as a project for a *compiling* course.
Technologies : OCaml, OCamlLex, Menhir, MIPS assembly

- Winter 2008 **Development of a logic circuit simulator and design of a simple microprocessor.**
Also developed a logic circuit graphic builder, with advanced visual debugging and introspection capabilities. The microprocessor was simulated on the logic circuit simulator, and provides a MIPS-like assembly. Included hardware multiplication.
Produced as a project for a *digital systems* course.
Technologies : OCaml, C, C++, Python, GTK+, Cairo
- 2007 – 2008 **Development of an inverted-pendulum motion based robot.**
The robot idea was based on the Segway, built using a LEGO NXT and gyros.
Robot control software was written using a realtime programming framework.
Technologies : LEGO NXT, C, Java, C++, Python, Matplotlib
- Summer 2007 **Development of a color filtering plugin for Compiz, Google Summer of Code 2007.**
The plugin aim is to improve computer accessibility for visually impaired persons.
A set of specific filters for a selection of impairments was also developed.
Technologies : C, OpenGL, Fragment Shaders, Python, Cairo
- 2007 **Development of PyAntNetwork, a networking routing simulator based on ant systems algorithms.**
Technologies : Python, GTK+, Cairo

Teaching experiences

- 2012 – 2014 **Teaching assistant, Université Paris Diderot.**
Fall 2012: IK3 (Java software project)
Spring 2013: TO2 (Data structures & Object Oriented programming)
Fall 2013: IK3 (Java software project)
Fall 2013: C EIDD (beginner C programming for EIDD students)
Spring 2014: LC4 (C programming for computer science students)
- 2010 – 2012 **Maple and Caml practical classes, Lycée Saint Louis.**
- Fall 2009 **ACM-ICPC teams coach.**
Training of 4 teams for the ACM-ICPC south european regionals

Skills

Programming languages

- C (advanced), C++ (advanced), C# (basic)
- Python (advanced), Bash (basic), Lua (basic)
- MATLAB (advanced)
- Web technologies (PHP/JavaScript/(X)HTML, CSS)
- SQL

Softwares

- GNU/Linux (Debian-based, Fedora, Gentoo, Arch Linux), FreeBSD, Microsoft® Windows®
- git, hg, Subversion version control systems
- Autotools/CMake build systems creation
- Regular use of LaTeX, Beamer, Matplotlib, Inkscape

Language skills

- French **native**
English **written and spoken**
German **scolar**

Hobbies

- Photography
Robotics