David Guyon

PhD student in Computer Science

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24 years old (1991)

Driving licence

Motorcycle licence



Educations

- 2015 2018 **PhD student in the Myriads team**, *IRISA*, Rennes. supervised by Mrs Christine Morin and Mrs Anne-Cécile Orgerie
- 2014 2015 Second year Master's degree in Computer Science Research, ISTIC, Rennes. French mention Assez Bien
- 2013 2014 First year Master's degree in Software engineering, ISTIC, Rennes. French mention Assez Bien, 11th in the ranking
- 2012 2013 **BEng in Computer Science**, Edinburgh Napier University, Scotland. Received a medal from the university
- 2010 2012 Institut Universitaire de Technologie, Angers/Cholet University. Electronic engineering and industrial computing, 2^{nd} in the ranking
 - 2010 Baccalauréat STI Génie Électrotechnique, NDBN High School, Beaupréau.

Professional Experiences

- Février 2015 Second year Master's internship in the Myriads team, IRISA, Rennes.
- à Juin 2015 Supervised by Mrs Christine Morin and Mrs Anne-Cécile Orgerie, my internship subject was to design a Cloud computing system that sees the user as a main lever to reduce the electrical energy consumed. The user selects an execution mode for her application that will allow to use more or less resources on the Cloud. By using less resources, the Virtual Machines consolidation is improved. The preliminary experimentation results show an important decrease in the energy consumed for a lower increase of the execution time. The internship finished with the publication of a research paper presented at the GreenCom 2015 conference.
 - May 2014 First year Master's internship in the ALF team, *Inria*, Rennes.
- to July 2014 In the ALF team with Mr Erven Rohou as my supervisor, I developed an extension of hwlock, a tool providing a graphical interface of the CPU architecture on which it is running. The extension named Dynamic lstopo displays caches and CPUs current usage level using performance hardware counters to help understanding the behavior of the processor. The internship finished with the publication of a research paper presented at the ICCS 2015 conference (class A on CORE).
- Sept. 2013 CROWD project, ISTIC, Rennes.
- to May 2014 With a team of 11 students with Mr David Gross-Amblard as our supervisor (IRISA, DRUID team), we built a workflow engine for a crowdsourcing web application. As for illustration, in case of emergency we can ask the crowd to indicate on a map the roads blocked and then give this map as input of the following workflow elements. The map will allow to find volunteers nearby the blocked roads to help the authorities. Following the completion of the project, I participated to the writing of a research paper for the BDA conference 2014.
 - Sept. 2012 3^{rd} year group project, Edinburgh, Scotland.
- to May 2013 With a team of 5 students we developed a web site and an Android application to provide to the students of our University to book for a taxis in Edinburgh. The demo is still available at http://davidguyon.olympe.in/.
 - April 2012 University placement in R&D, Company NGV Électronique, Cholet.
- to July 2012 Developer in the R&D department for a new BusCAN module (Hardware and Software). I searched for components, drew the schematic and studied an existing C kernel for a PIC microcontroller. Then I wrote the source code for a kernel update. Internship subject confidential.

Publications

- Sept. 2015 David Guyon, Anne-Cécile Orgerie and Christine Morin, **Energy-efficient Cloud**Elasticity for Data-driven Applications, 11th IEEE International Conference on
 Green Computing and Communications (GreenCom 2105)
- June 2015 Erven Rohou and David Guyon, **Sequential Performance: Raising Awareness** of the Gory Details, International Conference on Computational Science (ICCS 2015), class A on CORE
- October 2014 Ahmad Chettih, David Gross-Amblard, David Guyon, Erwann Legeay, and Zoltán Miklós, Crowd, a platform for the crowdsourcing of complex tasks, Base de Données Avancées (BDA 2014)

Skills

Prog.Languages C/C++, Java, Scala, OCaml, Python/Django, HTML5, CSS3, JS, SQL, PHP

Systems Linux (Debian, Archlinux), Windows (all versions)

Softwares/tools Eclipse, Vim, Emacs, Sublime Text, LATEX, PyCharm, Qt Creator

Languages French: mother tongue – English: fluent in all categories – CLES level 2 (2014)

Points of Interest

Music Guitarist for 15 years and author-compositor, my creations are available on this web site: songaccoustic.fr.

Associative Volunteer in the Animaje association that participates in the organization of the *Hellfest* festival. Volunteer militant at *GreenPeace*. Secretary and Treasurer of the association *Feu de Camp* which aims to organize an annual event to make known young local music bands.

General On my spare time, a friend and I are building a boat which uses a *Raspberry Pi* card. We want to be able to control the boat from an Android application (Scala) thanks to an Access Point on board. Information about all of my projects is available on my personal web page.