

SEBASTIEN DROUYER

5 rue du boulevard
69100, Villeurbanne
France
(+33) 6 80 90 78 17

EDUCATION

INSA LYON (IF) - Lyon, France

Institut National des Sciences Appliquées de Lyon / National Institute of Applied Sciences of Lyon

Master's Degree in Computer Science, September 2008 - June 2011

School ranked 3 / 126 in French engineering schools according to the Usine Nouvelle newspaper ¹

INSA ROUEN (SIB) - Rouen, France

Institut National des Sciences Appliquées de Rouen / National Institute of Applied Sciences of Rouen

Preparatory school, September 2006 - June 2008

International section (half the courses were taught in English)

School ranked 53 / 126 in French engineering schools according to the Usine Nouvelle newspaper ¹

LFKL - Kuala Lumpur, Malaysia

Institut National des Sciences Appliquées / National Institute of Applied Sciences

Core curriculum in science and technology with honours, September 2004 - June 2006

Lycée Français de Kuala Lumpur / French School of Kuala Lumpur (High school)

EXPERIENCE

RESEARCH AND DEVELOPMENT ENGINEER - Novius, Lyon, France

December 2010 - Present

- Conception and implementation of an Enterprise social software, ResoNova². Used internally as well as by various clients such as banks (Banque postale) or Research Institutes (Bioaster). Trained two developers to enable them to configure and extend the software. Technical support.
- Conception and implementation of an open source Content Management System named Novius OS³. Part of the core team, composed by 3 engineers and the Chief Information Officer. The software was used by the company developers to implement new websites. Trained 12 developers. I also took part in the redaction of the online documentation⁴ as well as in the open-source community management.
- FuelPHP (open source PHP framework) contributor, trainer and speaker. Trained internal development teams. Conference speaker (see presentations section).

RUBY ON RAILS DEVELOPER - Safecom, Bangkok, Thailand

June 2010 - October 2010

- Implemented new functionalities and improved performances to a Customer Relationship Management system named Peppercan⁵.
- Consultant at Venda, reviewed tickets in order to improve performance and customer satisfaction.

UNITY DEVELOPER - Lumai Prod, Bangkok, Thailand

June 2009 - August 2009

- Implemented new functionalities and improved performances to a Wii video game.

PRESENTATIONS

FUELPHP: A FRAMEWORK, YES - AUTOMAGIC, NO!

French conference introducing the FuelPHP framework⁶

- November 2012: PHPTour event in Nantes⁷
- July 2012: Libre Software Meeting event in Geneva⁸.

CONTESTS AND AWARDS

INTEL PERCEPTUAL COMPUTING CHALLENGE: FINALIST + ONGOING

June 2013 - September 2013

International software creation contest (750 finalists ⁹).

Conception and implementation of a software maximizing the Intel Perceptual Computing SDK ⁹ (gesture tracking, face tracking, voice recognition) : Perceptual Earth Facts ¹⁰.

Winnings: Creative* Interactive Gesture Camera (worth \$149) for now + \$100,000 (hopefully :))

NASA TOURNAMENT LAB - ROBONAUT CHALLENGE: 2ND AND 1ST PLACE ¹¹

May 2013

International TopCoder marathon challenge (1190 registrants, 40 competitors ^{11 12}).

2nd on original contest, 1st on the extended contest.

Conception and implementation of a vision algorithm capable of detecting leds and buttons on a taskboard. The algorithm is intended for Robonaut 2, an humanoid robot NASA wants to send to the ISS in order to assist astronauts¹³

Winnings: \$3900

NASA TOURNAMENT LAB - LONGERON CHALLENGE: 17TH PLACE ¹⁴

January 2013 - February 2013

International TopCoder marathon challenge (4056 registrants, 459 competitors ^{12 14}).

Conception and implementation of an algorithm optimizing the ISS solar collectors position in order to maximize the generated power¹⁵

GITHUB GAME OFF: 1ST PLACE ¹⁶

November 2012

International game creation contest (1300 registrants, 200 competitors ¹⁶).

Conception, design and implementation of a web unity game¹⁷

Winnings: Mac Mini (worth \$700)

NASA TOURNAMENT LAB - USPTO ALGORITHM CHALLENGE: 6TH PLACE ¹⁸

March 2012 - April 2012

International TopCoder marathon challenge (150 registered, 28 competitors ^{12 18}).

Conception and implementation of a vision algorithm capable of detecting figures and their labels on a patent paper¹⁹

INFOTEL MOBILE APPLICATION CONTEST: 2ND PLACE ²⁰

February 2011 - May 2011

National Student contest (15 competitors teams).

Conception, design and implementation of a mobile application allowing the users to buy eco-responsible food ²⁰

Winnings: Galaxy Tab (worth \$400)

INFOTEL WEB APPLICATION CONTEST: 1ST PLACE ²¹

January 2010 - May 2010

National Student contest (15 competitors teams).

Conception, design and implementation of a web application allowing to store and manage documents. I used the open-source software Tesseract (OCR recognition) in order to transform scanned forms (pictures) into usable data ²¹

Winnings: Toshiba Tecra computer (worth \$1000)

MOOCs

COURSERA - UNIVERSITY OF WASHINGTON: COMPUTATIONAL NEUROSCIENCE²²

Mai 2013 - June 2013: Statement of Accomplishment (97%)

COURSERA - UNIVERSITY OF EDINBURGH: ARTIFICIAL INTELLIGENCE PLANNING²³

February 2013 - March 2013: Statement of Accomplishment (97.6%, with distinction, 98th-99th percentile of passing students)

COURSERA - STANFORD: ALGORITHM, DESIGN AND ANALYSIS, PART 1²⁴

February 2013 - March 2013: Statement of Accomplishment (97%)

COURSERA - BERKELEY: SAAS

February 2012 - April 2012: Statement of Accomplishment (73%)

COURSERA - STANFORD: MACHINE LEARNING²⁵

October 2011 - January 2012: Statement of Accomplishment (100%)

HOBBIES

Bodybuilding, bicycle, travels

*

Notes

¹Usine Nouvelle's online ranking: <http://www.usinenouvelle.com/comparatif-des-ecoles-d-ingenieurs-2013> (french)

²ResoNova's website: <http://www.resonova.fr> (french)

³Novius OS' website: <http://www.novius-os.org/> (english)

Novius OS' youtube channel (presentation videos): <https://www.youtube.com/user/NoviusOS> (english)

⁴Novius OS documentation website: <http://docs.novius-os.org/> (english)

⁵Peppercan's website: <http://www.peppercan.com/> (english)

⁶FuelPHP conference' slides: <http://www.slideshare.net/novius-os/rml-2012-conference-fuelphp> (french)

⁷FuelPHP conference's audio recording: <http://youtu.be/TbIFqYwz-SI> (french)

⁸FuelPHP conference's video recording: <http://youtu.be/BbmZiJpTGSY> (french)

⁹Intel Perceptual computing challenge's website: <https://perceptualchallenge.intel.com/> (english)

¹⁰Perceptual Earth Facts' presentation video: <http://youtu.be/k2dnIkJhJyk> (english)

Perceptual Earth Facts' text presentation: <http://drouyer.com/perceptual-challenge/perceptual-earth-facts/help.jpg> (english)

¹¹Original contest rankings: <http://community.topcoder.com/longcontest/stats/?module=ViewOverview&rd=15652>

Original contest registrants:

<http://community.topcoder.com/longcontest/?module=ViewProblemStatement?module=ViewRegistrants&rd=15652>

Extended contest rankings: <http://community.topcoder.com/longcontest/stats/?module=ViewOverview&rd=15611>

Extended contest registrants:

<http://community.topcoder.com/longcontest/?module=ViewProblemStatement?module=ViewRegistrants&rd=15611>

¹²In TopCoder competitions: Registrants are people who subscribed to the contest, but did not necessarily submitted anything. Competitors are people whose submission was accepted (sent on time, compilation successful, respected limitations...).

¹³Contest's presentation video: <http://youtu.be/uXZllyJohAI>

Contest's problem statement: <http://www.topcoder.com/iss/robonaut/>

¹⁴Contest rankings: <http://community.topcoder.com/longcontest/stats/?module=ViewOverview&rd=15520>
Contest registrants:
<http://community.topcoder.com/longcontest/?module=ViewProblemStatement?module=ViewRegistrants&rd=15520>

¹⁵Contest's presentation video: <http://youtu.be/qiFDrwnUgUc> (english)
Contest's problem statement: <http://www.topcoder.com/iss/longeron/> (english)

¹⁶Contest's winners: <http://github.com/blog/1337-github-game-off-winners> (english)

¹⁷Contest's description: <https://github.com/blog/1303-github-game-off> (english)
My contest entry: <http://sebastien.drouyer.com/hotfix/> (english)

¹⁸Contest rankings: <http://community.topcoder.com/longcontest/stats/?module=ViewOverview&rd=15087>
Contest registrants:
<http://community.topcoder.com/longcontest/?module=ViewProblemStatement?module=ViewRegistrants&rd=15087>

¹⁹Problem statement: <http://community.topcoder.com/longcontest/?module=ViewProblemStatement&rd=15087&pm=11839>
(english)

²⁰Contest webpage (subject + rankings): <http://www.infotel.com/rejoignez-nous/concours-etudiants/concours-2010-2011/>
(french)

²¹Contest webpage (subject + rankings): <http://www.infotel.com/rejoignez-nous/concours-etudiants/concours-2009-2010/>
(french)

²²Course website: <https://www.coursera.org/course/compneuro> (english)

²³Course website: <https://www.coursera.org/course/aiplan> (english)

²⁴Course website: <https://www.coursera.org/course/aiplan> (english)

²⁵Course website: <https://www.coursera.org/course/ml> (english)