

SEBASTIEN DROUYER

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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

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

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

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 customers such as banks (Banque postale) or Research Institutes (Bioaster). I also 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. I also trained 12 developers and 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 + STILL 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) : my entry was Perceptual Earth Facts ¹⁰.

Winnings: Creative* Interactive Gesture Camera (worth \$149) for now + still ongoing

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 positions 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)

MASSIVE OPEN ONLINE COURSES

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 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, open-source contributor

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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)