

# Enrique Flores Saez

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## Work experience

- 2012–2016 **Researcher**, *Universitat Politècnica de València (UPV)*, Spain.
- Research focused on source code monolingual and cross-lingual re-use detection.
  - Source code monolingual and cross-lingual retrieval.
  - Developer of source code re-use detection systems inspired in Natural Language Processing techniques
  - Organiser of two editions of source code re-use detection competitions (see <http://goo.gl/ZcriU9> and <http://goo.gl/PPbtsy>)
  - Participation in the project: “TEXT-ENTERPRISE 2.0: Text comprehension techniques applied to the needs of the Enterprise 2.0” collecting corpora and developing tagging tools for source code re-use detection research purposes.
  - To see the list of publications related to my research work, please visit my Google Scholar at <https://goo.gl/Rhq1nz>
- Feb–May 2015 **Visitor Researcher**, *INAOE, Mexico*, Research Group: Lab. of Language Technologies, Participation in the project: WIQ-EI project.
- Jan 2015 **Visitor Researcher**, *Center for Computing Research, National Polytechnic Institute, Mexico*, Research Group: Lab. of NLP, Participation in the project: WIQ-EI project.
- Aug–Dec 2012 **Visitor Researcher**, *Center for Computing Research, National Polytechnic Institute, Mexico*, Research Group: Lab. of NLP, Participation in the project: WIQ-EI project.
- Jun–Nov 2010 **Software Engineer**, *Dept. of Computer Systems and Computation, Universitat Politècnica de València*, Participation in project: Language Technologies applied to systems modelling Information (TeLMoSis).  
The main objective of TeLMoSis project is to combine advances in Human Language Technologies, particularly semantic analysis, with information system modelling.
- ## Research projects
- Oct–Dec 2015 **Senior Technician**, *PRHLT Research Center, Universitat Politècnica de València*, JITL: Automatic internationalisation for locating JIT web interfaces, Ministry of Education, Culture and Sport (MECD) project SP20140775.
- Jan–May 2015 **Senior Technician**, *PRHLT Research Center, Universitat Politècnica de València*, DIANA-APPLICATIONS - Finding Hidden Knowledge in Texts: Applications project: TIN2012-38603-C02-01.
- 2010–2014 **Government Scholarship Researcher Training**, *Spanish Ministry of Science and Innovation, Universitat Politècnica de València*, TEXT-ENTERPRISE 2.0: Text comprehension techniques applied to the needs of the Enterprise 2.0 project: TIN2009-13391-C04-03.

2011–2015 **WIQ-Ei Project**, *Web Information Quality Evaluation Initiative*, Universitat Politècnica de València, IRSES project (grant no. 269180) within the FP7 Marie Curie People Framework.

Dec–Mar 2011–2013 **Bilateral project**, *Applications of Natural Language Processing to the Need of the University*, UPV, AECID-PCI AP/043848/11.

Jun–Nov 2010 **Scholarship expertise**, *Dept. of Computer Systems and Computation*, Universitat Politècnica de València, The main objective of TeLMoS project is to combine advances in Human Language Technologies, particularly semantic analysis, with information system modelling..

### Teaching experience

Jan–Jun 2014 **Subject: Information storage and retrieval systems**, *School of Engineering in Computer Science*, Universitat Politècnica de València, Teaching Assistant.

Jan–Jun 2013 **Subject: Information storage and retrieval systems**, *School of Engineering in Computer Science*, Universitat Politècnica de València, Teaching Assistant.

Mar 2013 **Plagiarism and re-use detection Laboratory**, *MISC laboratory*, University of Constantine 2, 1 week.

Apr 2013 **Plagiarism detection Laboratory**, *idEC, Master in Forensic Linguistics*, IULA-Universitat Pompeu Fabra, 4h.

## Education

Feb 2012 – **PhD in Computer Science**, *Universitat Politècnica de València*.

May 2016 Title of the thesis: Mono- and Cross-lingual Source Code Re-use Detection. Research stays at the National Polytechnic Institute of Mexico and National Institute of Astrophysics Optics and Electronics (Mexico) (Aug - Dec 2012 and Jan - Apr 2015).

Master's Thesis *Source code re-use across programming languages*. In this work are proposed two models for source code re-use detection and their performance at mono- and cross-lingual level. Average Grade: 9.5 out of 10. Specialisation in Pattern Recognition and Language Technologies.

2009–2012 **Master's Degree in Artificial Intelligence, Pattern Recognition and Digital Imaging**, *Universitat Politècnica de València*.

CS Final Project *Development of a system for managing collaborative work*. Web application for managing tasks and questions in a workgroup. It allows different types of surveys, mailing lists, ratings and comments.

2004–2010 **Computer Science Degree (5-years degree)**, *School of Engineering in Computer Science*, Universitat Politècnica de València, *Computer Science*. Specialisation in Artificial Intelligence and Pattern Recognition.

## Lectures and talks

School of Engineering in Computer Science **Universitat Politècnica de València**, *Computers and code: The coding world*, Jun 2015.

- School of Engineering in Computer Science **Universitat Politècnica de València**, *Can we automatically detect plagiarism?*, Jun 2014.
- Mexico city, Mexico **Universidad Autónoma Metropolitana**, *Talk: "Source Code Re-use Plagiarism Detection"*, 30 Jan 2015.
- Mexico city, Mexico **Universidad Autónoma Metropolitana**, *Talk: "PAN@FIRE: Detection of Source Code re-use (SOCO)"*, 30 Jan 2015.
- Toluca, Mexico **Universidad Autónoma del Estado México**, *Talk: "Source Code Re-use Plagiarism Detection"*, 23 Jan 2015.
- Toluca, Mexico **Universidad Autónoma del Estado México**, *Talk: "PAN@FIRE: Detection of Source Code re-use (SOCO)"*, 23 Jan 2015.
- Sevilla **V Jornadas Tratamiento de la Información Multilingüe y Multimodal (TIMM)**, *Doctoral Consortium: "Cross-Language Source Code Re-use Detection"*, Jun 2014.
- Doctoral Consortium **Universitat Politècnica de València**, *Computers and code: The coding world*, Jun 2015.
- Puebla, Mexico **Instituto Nacional de Astrofísica, Óptica y Electrónica**, *Talk: "Cross-Language Source Code Re-use"*, 6 Dec 2012.
- Mexico city, Mexico **University of London**, *Talk: "Detection of Cross-Language Source Code Re-use"*, 9 Oct 2012.
- Puebla, Mexico **Instituto Nacional de Astrofísica, Óptica y Electrónica**, *Talk: "Cross-Language Source Code Re-use"*, 6 Dec 2012.
- Puebla, Mexico **Instituto Nacional de Astrofísica, Óptica y Electrónica**, *9th Workshop of Human Language Technologies*, 18-19 Oct 2012.
- Constantine, Algeria **University of Constantine 2**, *Talk: "Plagiarism and re-use detection"*, 2 Mar 2012.

## Events and conferences

- \*SEM 2015 **Publication Co-Chair** *The fourth joint conference on lexical and computational semantics*
- CLEF 2013 **Member of Local organising committee** *Conference and Labs of the Evaluation Forum*
- CERI 2012 **Member of organising committee** *2nd Spanish Conference on Information Retrieval*
- SWERC 2013 **Judge Committee Member** *Southwestern Europe Regional Contest*
- SWERC 2012 **Judge Committee Member** *Southwestern Europe Regional Contest*
- CLOCALPROG 2013 **Judge Committee Member** *Local programming competition - UPV*

## Languages

Spanish **Mother tongue**  
Valencian **Mother tongue**  
English **Intermediate level**

## Programming skills

Languages Java, C++, Python, Unix Shell, GNU Octave, Matlab, LISP, SQL, MySQL, HTML, XML, Haskell, Prolog  
Software Lucene, Weka, NLTK, Apache, Tomcat, SVN

## Publications

E. Flores, P. Rosso, E. Villatoro-Tello, L. Moreno, R. Alcover, and V. Chirivella, "PAN@FIRE: Overview of CL-SOCO track on the Detection of Cross-Language Source COde Re-use," in *FIRE 2015 Working Notes. Seventh International Workshop of the Forum for Information Retrieval Evaluation, Gandhinagar, India, 4–6 December, 2015*.

E. Flores, P. Rosso, L. Moreno, and E. Villatoro-Tello, "On the detection of source code re-use," in *Proceedings of the Forum for Information Retrieval Evaluation, FIRE '14, (New York, NY, USA), pp. 21–30, ACM, 2015*.

E. Flores, L. Moreno, and P. Rosso, "Detecting source code re-use with ensemble models," in *Proceedings of the 4th Spanish Conference on Information Retrieval (CERI) (accepted), 2016*.

E. Flores, A. Barrón-Cedeño, L. Moreno, and P. Rosso, "Cross-Language Source Code Re-Use Detection Using Latent Semantic Analysis," vol. 21, no. 13, pp. 1708–1725, 2015.

E. Flores, A. Barrón-Cedeño, L. Moreno, and P. Rosso, "Uncovering source code reuse in large-scale academic environments," *Computer Applications in Engineering Education*, vol. 23, no. 3, pp. 383–390, 2015.

E. Flores, P. Rosso, L. Moreno, and E. Villatoro-Tello, "PAN@FIRE: Overview of SOCO track on the detection of SOurce COde re-use," in *Sixth Forum for Information Retrieval Evaluation (FIRE 2014), Bangalore, India, 2014*.

E. Flores, A. Barrón-Cedeño, L. Moreno, and P. Rosso, "Cross-language source code re-use detection," in *Proc. 3rd Spanish Conf. on Information Retrieval, CERI-2014*, pp. 145–156, 2014.

E. Flores, M. Ibarra-Romero, L. Moreno, G. Sidorov, and P. Rosso, "Modelos de recuperación de información basados en n-gramas aplicados a la reutilización

de código fuente,” in *Proc. 3rd Spanish Conf. on Information Retrieval, CERI-2014*, pp. 185–188, 2014.

E. Flores, A. Barrón-Cedeño, P. Rosso, and L. Moreno, “DeSoCoRe: Detecting Source Code Re-use across programming languages,” in *Proceedings of the Demonstration Session at the Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, (Montréal, Canada), pp. 1–4, Association for Computational Linguistics, June 2012.

E. Flores, A. Barrón-Cedeño, P. Rosso, and L. Moreno, “Towards the detection of cross-language source code reuse,” in *Natural Language Processing and Information Systems*, vol. 6716 of *Lecture Notes in Computer Science*, pp. 250–253, Springer, 2011.

E. Flores, A. Barrón-Cedeño, P. Rosso, and L. Moreno, “Detección de reuso de código fuente entre lenguajes de programación con base en la frecuencia de términos,” *IV Jornadas TIMM Tratamiento de la Información Multilingüe y Multimodal 7 y 8 de abril*, p. 21, 2011.

E. Flores, A. Barrón-Cedeño, P. Rosso, and L. Moreno, “Detecting Source Code Reuse across Programming Languages,” *27th Conference of the Spanish Society for Natural Language Processing (SEPLN’11)*, 2011.

M. Franco-Salvador, I. Bensalem, E. Flores, P. Gupta, and P. Rosso, “PAN 2015 Shared Task on Plagiarism Detection: Evaluation of Corpora for Text Alignment,” in *Working Notes Papers of the CLEF 2015 Evaluation Labs*, vol. 1391 of *CEUR Workshop Proceedings*, CLEF and CEUR-WS.org, 2015.