Alejandro
REYES AMARO

Curriculum Vitae

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Current position

2016 - up to now
Temporary Adjunct Professor–Researcher, *Department of Informatics, Laboratory of Numeric Sciences of Nantes (LS2N)*.
University of Nantes

Experience

2013 - 2016
PhD Student, *LN2N (Inria)*.
Carrier of a three years research project, with the supervision of two master students. Creation of *POSL*, a parallel oriented high level language allowing to build meta-heuristic-based solvers, to solve combinatorial optimization problems.
https://github.com/alejandro-reyesamaro/POSL
28 583 lines of code in C++.

2010 - 2013
Researcher - Instructor, *University of Havana - University of Balearic Islands*.
Member of a research team carrier of divers MAEC-AECID projects (A/023109/09, A/030033/10 et A2/037538/11) to construct serious games able to capture movements of patients with physical disabilities, to evaluate the progression of physical rehabilitation.
https://github.com/alejandro-reyesamaro/iKinematic_arm
38 768 lines of code in C# and 4 062 lines of code in MATLAB

2006 - 2011
Freelance.
- Update of the data and data access layer of the on-line booking system of *Umbrella Travel* web site. (https://www.umbrellatravel.com/).
  (not open code)
  2 343 lines of code in C# (LinQ, ASP.NET)
- Leader of a *freelances* team for the creation of:
  - *Neurohipot* : A system to evaluate attention and short-term memory skills of in the elderly, to face the senile dementia diagnostic, for the university-hospital Gregorio Marañón, Spain.
    https://github.com/alejandro-reyesamaro/Neurohipot
    29 421 lines of code in C# (Microsoft Access Data Base)
  - On-line store for buying Cuban products from abroad and distribute them in Cuba.
    http://git@github.com:alejandro-reyesamaro/vSotre_cuba.git
    47 330 lines of code in C# (SQL Server, ASP.NET)

2008 - 2010
IT Developer, *Software & Consulting Group*.
Member of a developers team to create:
- A web site for the evaluation of social responsibility levels of small enterprises in Costa Rica (wed design included).
  (not open code)
  89 193 lines of code in C# (SQL Server, ASP.NET)
- A plugin for the *back–end* of the internal services management system of the enterprise (*CSG*).
  (not open code)
  5 165 loc C# (Microsoft Access Data Base)

Education

2013 - 2016 **PhD in Computer Sciences**, *UFR Sciences et techniques, University of Nantes, France*.
<u>Keywords</u>: Constraint satisfaction problems, meta-heuristics, parallelism, communication strategies.

2007 - 2011 **Master's degree in Mathematical Sciences. Numerical Analysis**, *Faculty of Mathematics and Computer Sciences. University of Havana, Cuba*.
<u>Keywords</u>: Inverse kinematics, path finding, collision detection, particles filtering

2001 - 2006 **Bachelor of Computer Science**, *Faculty of Mathematics and Computer Sciences. University of Havana, Cuba*.
<u>Keywords</u>: Unfeasible primal–dual interior point method, linear programming, large scale problems.

Computer skills

Programming languages
C#, C/C++, Java/Javascript, MATLAB, R.

Web and data basses
ASP.NET, HTML/CSS, SQL Server, Microsoft Access Database, LinQ, WCF.

Version control systems
Intermediate user of Git.

Other computer and et mathematics skills

- Operating systems:
  - Linux
  - Windows
- Multi-core Technologies:
- Combinatorial optimization
- Local search
- Function approximation
- Non–linear programming

- Visualization :
  - VirtualBox
  - VMwarre
- Massively parallel architectures
- Constraint programming
- computer vision
- Kinet cams
- Linear numerical algebra

Languages (Common European Framework of Reference (CEF))

★★★★★ **Spanish**   *Native*

★★★★☆ **English**   *Listening: C1, Reading: C1, Speaking: C1, Writing: C1*

★★★★☆ **French**   *Listening: C1, Reading: C1, Speaking: C1, Writing: C1*

Hobbies

- Music:
  - https://youtu.be/KTkxVKzovOE
  - https://youtu.be/yZxXxMNTo_Y
- Latin dance: Salsa, bachata, etc.
- Sports:
  - Volleyball
  - Table tennis
  - Diving
  - Body-building
- Spare time: Horseback riding