

Luis C. Cobo
luisca@gatech.edu

Education

- PhD Electrical and Computer Engineering, Georgia Institute of Technology, Aug 2009 - present
 - Overall GPA 4.0/4.0, coursework and examinations completed
 - Current research on **machine learning** and human-computer interaction
 - Developed a multi-player on-line 3d game with Python and Panda3d to compare learning paradigms.
 - Implementing and devising new **reinforcement learning** algorithms that extract domain knowledge from non-expert demonstrations.
- MSc Electrical Engineering, Illinois Institute of Technology, 2005 - 2006 (GPA: 4.0/4.0)
 - Master's thesis including:
 - System to balance medical imaging computations on a cluster
 - Multiplied by 6 the utilized capacity of the department cluster, system is still in use.
 - Research on new technique for improved radiography images
 - Improve Multiple Image Radiography system decreasing required samples.
- Ingeniero Superior de Telecomunicación (Telecommunications Engineering), ETSIT-UPM, Madrid, Spain, 2001 – 2006

Work experience

- Google Inc., Mountain View, CA, May – August 2011
 - Software Engineer Intern, Ads Quality.
- cozybit Inc., San Francisco, CA, Oct 2006 - Oct 2008
 - **Mesh networking** for the **One Laptop Per Child** project
 - Development of the **official Linux driver** and Marvell 8388 **firmware** for OLPC mesh networking.
 - Design and development of a softmac version of the driver/firmware with Access Point capabilities.
 - **o11s**: first open source **IEEE 802.11s draft-compliant** mesh stack for the Linux kernel
 - **Complete design and implementation** of the mesh stack.
 - **Merged in Linus' tree in 2.6.26 release.**
- International Relations Office, UPM, Madrid, Spain, Nov 2004 – May 2005 - Web developer
- DyR S.A., Madrid, Spain, Nov 2003 – May 2004 - Web developer

Volunteering

- Deployment of IT services for BorgouNET. Parakou, Benin (West Africa), August 2006
 - VoIP services, prepaid-card based wireless Internet access, extension of the program to remote areas.
- Deployment of a rural, solar-powered, HF radio based network on Urubamba, Perú. July 2004
 - Part of the award-winning development program "Enlace Hispano Americano de Salud" (EHAS).
 - Voice, email and remote login service on isolated villages on the Peruvian Andes.
 - Preparation, deployment of the network, and training of the final users.

- Webmaster of EESTEC International, 2003 – 2004
- Teacher in GNU/Linux introduction classes 2001 - 2002
 - Three courses at ETSIT-UPM, recognized by the university as a valid course credit. Documentation coauthor.

Publications

- Luis C. Cobo, Charles L. Isbell and Andrea L. Thomaz. Automatic Task Decomposition and State Abstraction from Demonstration. *International Conference on Autonomous Agents and Multiagent Systems, June 2012.*
- Luis C. Cobo, Peng Zang, Charles L. Isbell and Andrea L. Thomaz. Automatic State Abstraction from Demonstration. *International Joint Conference on Artificial Intelligence, July 2011.*
- Luis C. Cobo and Ian F. Akyildiz. Bacteria-based Communications in Nanonetworks, *Nano Communication Networks (Elsevier) Journal, Vol. 1, No. 4, pp. 244-256, December 2010.*
- Luis C. Cobo and Jovan G. Brankov. Evaluation of Model Based Parametric Image Estimation in MIR. *IEEE International Symposium on Biomedical Imaging, 2007*
- Jovan G. Brankov and Luis C. Cobo. Iterative method for parametric image estimation in MIR. *IEEE Nuclear Science Symposium and Medical Imaging Conference, 2006*
- Javier Cardona, Jose M. González, and Luis C. Cobo. Wireless Meshing with the One Laptop Per Child. *Foro Internacional de Software Libre, 2007*

Additional information

- Favorite languages: Python, C, Java, bash, Matlab
- Extensive experience in Linux kernel, distributed and multithreaded systems
- SCMs: git, svn, cvs, perforce
- Extensive travel experience in Latin America, Europe, North and West Africa and Asia
- Proficient in Spanish and English
- Intermediate French and Portuguese

Honors and Awards

- GTRIC Fellowship Award for Best Poster, 2012.
- Google Engineering Intern Scholarship, 2011.
- "la Caixa" fellowship for graduate studies in the USA, 2008
 - Personally awarded by the King and Queen of Spain.
- Second position (national level) in Lucent Global Science Scholars Program, 2002
- Bronze medal on National Physics Olympics (national level), Spain 2001