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# SALVADOR MELENDEZ

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**LinkedIn:** <https://www.linkedin.com/in/salvadmelendez>

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**OBJECTIVE:** To innovate and develop future technologies providing creative solutions in the areas of computer networks and information technology.

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## EDUCATION:

*University of Texas at El Paso*

PhD in Electrical and Computer Engineering (Candidate) / GPA: 3.75      Spring 2013 – Fall 2015

*University of Texas at El Paso*

Master of Science in Computer Engineering / GPA: 3.8      Spring 2011 – Fall 2012

*Tecnologico de Monterrey, Mexico*

Bachelor of Science in Mechatronics / GPA: 3.5      Summer 2002 – Fall 2006

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## PUBLICATIONS:

E. Gurrola, **S. Melendez**, M. P. McGarry, P. J. Teller, D. Doria, and D. Bruno, “*The Effect of Network Delay Estimation Error on Computation Offloading Decisions*”, IEEE CloudNet 2015.

**S. Melendez**, M. P. McGarry, P. J. Teller, and D. Bruno, “*Communication Patterns of Cloud Computing*”, IEEE Globecom 2015.

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## TECHNICAL SKILLS:

- Programming Languages: C/C++, Python, MATLAB
  - Application Software: NS-3 Discrete-event Network Simulator, MATLAB, Microsoft Office, LaTeX
  - Computing Platforms: Microcontroller 68HCS12, PandaBoard SBCs, NVidia Tesla GPU
  - Hardware Development Platforms: FPGAs (Xilinx)
  - Spoken Languages: English (fluent), Spanish (native)
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## WORK EXPERIENCE:

*UTEP High Performance Systems Laboratory (HiPerSys)* (Jan. 2014 – Present) – AHPCRC Research Assistant

- Develop expertise in cloud computing to identify communication patterns that can be improved or modified to reduce communication delays and develop NS-3 simulation models on computation offloading decisions.

- Poster Presentations (“Cooperation between Cloud Resource Provisioning and Network Protocols”) at:

a) ARL Boot Camp (San Jose, CA) – Aug. 2014

b) UTEP Graduate Research Expo (El Paso, TX) – Nov. 2014

*UTEP Electrical and Computer Engineering Department* (Aug. 2013 – Jan. 2014) – Teaching Assistant for the Digital Systems Design course

- Elaborate and assign laboratory activities, assist students during office hours, cover lectures, and grade assignments.

*UTEP Communication Networks Laboratory* (Jan. 2012 – Aug. 2013) – Research Assistant

- Develop network applications by using Socket Programming and Network Protocols (RAW and UDP sockets), elaborate tutorials for using the MATLAB Parallel Computing Toolbox using GPUs, and set up a Wireless Video Surveillance Networks Testbed using SBCs.

*MEXROLL Mexico (Feb. 2007 – Dec. 2010)* – Design Engineer

- Design of storage and material handling systems, and development of software applications to automate clerical tasks that handle prices, specifications and system components.

*FORMOSA Heavy Industries, Kaohsiung, Taiwan / Bill Young* (Oct. 2007 – Nov. 2007)

- Participate in a training course to design Automatic Storage and Retrieval Systems (ASRS).

*PROMAT, Chicago, IL / MEXROLL Mexico (Jan. 2007)* – Guest Exhibitor

- Present storage and material handling systems to companies involved in manufacturing, warehousing, logistics and distribution.

*FANUC Robotics, Aguascalientes, Mexico / Humberto Sotelo* (Apr. 2006)

- Participate in a training course in robotics and simulations.

*Casas de Cuidado Diario, Chihuahua, Mexico (Jan. 2005 – Dec. 2006)*

- As a social service, coordinate educational activities for children.

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## AWARDS AND ACHIEVEMENTS:

2014-2015 Outstanding Research Assistant (Communication Networks Laboratory)

2013-2014 HSF/Google Scholarship (Google Scholar’s Retreat / 24HoursOfGood)

2013 Graduate Student Fellowship Incentive Award

2013 Outstanding Research Assistant (Communication Networks Laboratory)

2013 Best score in PhD Qualifying Exams