





**Texas A&M University**

Type: Academic

Graduate Assistant - Research (August 2011 - Present)

Advised by Dr. Radu Stoleru in the Department of Computer Science and Engineering

- **A Cyber-Physical Systems Approach to Water Distribution System Monitoring**
  - Designed algorithms for optimal event detection and localization, flow learning, MAC and group communication protocols, and flow control in water distribution systems, and flow-based systems in general
  - Developed and maintained a C++ simulator that uses inputs from EPANET (a software to model Water Distribution System hydraulics) to simulate the movement of the sensors and communication among sensors and beacons in the Cyber-Physical System
- **Co-existence of wireless technologies**
  - Performed analytical modeling and model validation of MAC layer protocols for technologies such as 802.11, BMAC, Zigbee, and modeled their co-existence through a Markov Chain model of the channel
  - Developed an algorithm based on game theory concepts to tune parameters to improve the throughput of the coexisting technologies.

**Intel Corporation, Hillsboro, OR**

Type: Industry

Software Intern Graduate Level (May 2014 - August 2014)

- **Intel Common Connectivity Framework for Chrome browser**
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**Texas A&M University**

- **Instructor**

- Graduate course - CSCE 689 Cloud Computing (Spring and Summer 2018)**

- **Web-based course co-taught with Dr. Dilma Da Silva**

- **Responsible for preparing video lectures, research paper discussions, projects, quizzes, and grading for 50 students**

[TK.11] "N2Women meeting," 14<sup>th</sup> IEEE International Conference on Sensing, Communication and Networking (SECON), 2017

[TK.

## **Service**

Faculty Member of Student Fairness Committee under the Academic Senate at San José State University

Judge, Mathematics and Computer Science/Engineering and Physics & Astronomy, Texas Junior Science and Humanities Symposium, 2015

Judge, Mathematics and Computer Science/Engineering, Texas Junior Science and Humanities Symposium, 2014

## **Membership**

Membership Co-chair of Networking Networking Women (N<sup>2</sup> Women) community

Professional Member of ACM, IEEE, and USENIX