Yesenia Velasco / Computer Science

980-229-2155 velasco990@gmail.com www.cs.duke.edu/~yvelasco

Summary

To bring passion, motivation, and intellect by investing in the success of the team, the company, and the customer.

Skills

- Explain complex technical topics with clarity to both non-technical and technical audiences
- Highly organized
- Experience working with individuals from diverse backgrounds and different time zones
- Deliver virtual seminars and workshops
- Languages (Spanish-fluent in speaking and writing)
- Proficient in Python, C/C++, Java and experience with Matlab, HTML, CSS
- Knowledgeable of Cisco Webex and TeamSpace
- CCNA (In Progress)
- Software Define Networks (SDN)
- Distributed Computing
- Technical Writing

Education

Duke University, Durham, NC – M.S in Computer Science – 2016-2018

North Carolina Central University - B.S in Computer Science and Mathematics—2012-2016

Employment Experience

- Teaching Associate | Support Staff Specialist, Duke University, 2018-Current

Teach computer science courses to students of very diverse backgrounds and different time zones at Duke University. Assist in managing multiple large courses (200-300+ students). Lead multiple teams of graduate and undergraduate teaching assistants. Discover new and innovative ways to improve the student experience Resolve student and course staff concerns. Manage the digital spaces of courses to create a welcoming and inclusive environment.

- Teacher’s Assistant, Duke University, 2017-2018

Assist the professor in managing the course, students, grades, and undergraduate TA’s. Tutor students individually or in small groups in computer science subjects.

- Math and Computer Science Tutor, North Carolina Central University, 2014-2016

Tutor students individually or in small groups in various math and computer science subjects.

- Intern, Idaho National Laboratory, Idaho Falls, ID, 2016 summer

Worked on simulating the cold cap physics of a nuclear waste melter using Star-CCM+ modeling software, C, and Matlab.

- CAT Vehicle REU Intern, University of Arizona, Tucson, AZ, 2015 summer

Implemented a hybrid model predictive controller for path planning and obstacle avoidance of an autonomous vehicle.

- Rams Intern, Oak Ridge National Laboratory, Oak Ridge, TN, 2014 summer

Helped to work with finite memory automata reconstruction from data with an application in predicting cancer cell tumor growth using the General Systems Problem Solver.

Projects

Neighboring Vehicle Behavior Prediction Using A Gated Recurrent Unit Neural Network

Provide a new method of neighboring vehicle maneuver prediction by utilizing a Gated Recurrent Neural Network. CAN data collected from neighboring vehicles via Vehicle-to-Vehicle messaging is collected and fed into the model for real-time route prediction.

Publications

- ePrivateEye: To the Edge and Beyond!. Christopher Streiffer, Animesh Srivastava, Victor Orlikowski, **Yesenia Velasco**, Vincentius Martin, Nisarg Raval, Ashwin Machanavajjhala, and Landon P. Cox. SEC 2017. San Jose, CA, October, 2017
- Donghyun Kim, **Yesenia Velasco**, Wei Wang, R.N. Uma, Rasheed Hussain, Sejin Lee, "A New Comprehensive RSU Installation Strategy for Cost-Efficient VANET Deployment," IEEE Transactions on Vehicular Technology (TVT), vol. 66, issue 5, pp. 4200-4211, May 2017
- Donghyun Kim, **Yesenia Velasco**, Zishen Yang, Wei Wang, Rasheed Hussain, and R.N. Uma, "Cost Effective Mobile and Static Road Side Unit Deployment for Vehicular Adhoc Networks," Proceedings of International Workshop on Computing, Networking and Communications (CNC) in conjunction with International Conference on Computing, Networking and Communications (ICNC 2016), February 15-18, 2016, Kauai, Hawaii, USA.

Presentations

- LatinX panel speaker, Duke University's LatinX, November 17, 2016.

- Cost Effective Mobile Static Road Side Unit Deployment for Vehicular Adhoc Networks," International Workshop on Computing, Networking Communications (CNC), February 15-18, 2016, Kauai, Hawaii, USA.

- Cost Effective Mobile Static Road Side Unit Deployment for Vehicular Adhoc Networks, 2015 Graduate Undergraduate Research Symposium (GURS), North Carolina State University, April 11, 2015.

Awards

- CRA-W Scholarship. Washington, D.C 2017

Funded my transportation, meals, stay, and ticket to the Computing Research Association of Women Conference.

- Recipient of Marjorie Lee Brown Award for Excellence in Mathematical Sciences, North Carolina Central University, 2016

Honor by the department of Mathematics awarded to a graduating student who has shown excellence in the mathematical sciences.

- Magna Cum Laude, North Carolina Central University, 2016

Earned by graduating students with a cumulative GPA of 3.5-3.79

- Graduate and Undergraduate Research Symposium (GURS), North Carolina Central University, 2015

Won first place presentation award in the Undergraduate, Natural Science category