

Presentacion Rivera Reyes
Associate Professor of Teaching
Department of Engineering Education

Work Address:

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EDUCATION

Ph.D., Engineering Education, Utah State University, December 2015
Dissertation: “Task Interpretation and Conceptual Understanding in Electronics Laboratory Work.”
Advisor: Dr. Oenardi Lawanto
M.B.A., Business Administration, National University of Honduras, March 1995
B.S., Electrical Engineering, National University of Honduras, September 1993

PROFESSIONAL EXPERIENCE

TEACHING AND RESEARCH

Assistant Professor of Teaching, Dept. of Engineering Education University at Buffalo, Buffalo, NY	Jan 2018 – present
Postdoctoral Fellow, Dept. of Electrical and Computer Engineering University of Nebraska-Lincoln, NE	Jan 2016 – Jan 2018
Teaching Assistant, Dept. of Engineering Education Utah State University, UT	Aug 2013 – Dec 2015

INDUSTRY

Transmission Planning Manager, Technical Dept. Claro – Wireless Provider, Honduras	June 2007 – July 2009
Access System Manager, Dept. of Engineering Columbus Network – Telecom Carrier, Honduras	Sep 1999 – May 2008
Planning & Cell Field Engineer, Technical Dept. Millicom International Cellular – Wireless Provider, Honduras	May 1996 – Aug 1999

HONORS AND AWARDS

Graduate Student Teacher of the Year, Department of Engineering Education, Utah State University, 2015

PUBLICATIONS

Delahunty, T., Pérez, L.C., **Rivera-Reyes, P.**, Psota, E. and Molfese, D. (2018). Investigating the Relationship between Spatial Ability and Electrical Circuits Problem Solving in an Engineering Degree Program, 7th International Conference on Spatial Cognition, Rome, Italy, Sep 10-14, 2018, n. pages: 6.

Rivera-Reyes, P. and Pérez, L.C., "Assessing the demand of problems in an undergraduate electrical engineering course," *2018 IEE Frontiers in Education (FIE)*, San Jose, CA, USA, 2018, pp. 1-83. Doi: 10.1109/FIE.2018.8659058

Lopez, S. E., & Lawanto, O., & **Rivera-Reyes, P.** (2018, June). *Developing Portable Lab Kits for Foundational Circuits Class*. Paper presented at 2018 ASEE Annual Conference & Exposition, Salt Lake City, Utah. <https://peer.asee.org/30310>

*Delahunty, T., Pérez, L.C. and **Rivera-Reyes, P.** (2018). Exploring the Role of Spatial Skill in Electrical Circuits Problem Solving. Engineering Design Group Conference, Kingston, Jamaica.

(*)*The Frank Oppenheimer Award for Excellence in presenting the best paper, January 2018, Engineering Design Graphic Division, ASEE.*

G. Duffy, S. Sorby, **P. R. Reyes**, T. Delahunty, L. Perez and J. Ravishankar, "The Link between Spatial Skills and Engineering Problem-Solving," 2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE), Wollongong, NSW, 2018, pp. 272-278. DOI: 10.1109/TALE.2018.8615193

****Rivera-Reyes, P.**, Lawanto, O. and Pate, M. L. (2017). Students' Task Interpretation and Conceptual Understanding in Electronics Laboratory. *IEEE Transactions on Education*, Vol. 60, Issue 4, p. 265-272.

(**) *Theodore E. Batchman Best Paper Award 2017, IEEE Education Society.*

Rivera-Reyes, P., Lawanto, O. and Pate, M.L. (2016). Understanding Student Coregulation in Task Interpretation during Electronics Laboratory Activities. *International Education Studies*, Vol. 9, Issue 7, p. 1-9.

Rivera-Reyes, P. and Pérez, L. C., "Abstraction and problem solving in an undergraduate electrical engineering circuits course," 2016 IEEE Frontiers in Education Conference (FIE), Eire, PA, USA, 2016, pp. 1-7. doi:10.1109/FIE.2016.7757594

Pérez, L.C. and **Rivera-Reyes, P.** (2016, June). *Abstraction Thresholds in Undergraduate Electrical Engineering Curricula*. Paper presented at 2016 Annual Conference & Exposition, New Orleans, Louisiana. 10.18260/p.26487.

Rivera-Reyes, P., & Lawanto, O., & Boyles, R. E. (2013, June), *Engineering and Technology Education Fields: Providing Synthesis and Knowledge through Historical Perspectives*. Paper presented at 2013 ASEE Annual Conference & Exposition, Atlanta, Georgia. <https://peer.asee.org/19514>

Rivera-Reyes, P., & Boyles, R. E. (2013, June). *Training in Troubleshooting Problem-Solving: Preparing Undergraduate Engineering Students for Industry* Paper presented at 2013 ASEE Annual Conference & Exposition, Atlanta, Georgia. <https://peer.asee.org/22646>

Rivera-Reyes, P., Boyles, R.E., & Lawanto, O. (2012, June). *Offsetting Gender Bias in Engineering: Gender Equity Internet Controlled Fish Farm Curriculum Activity*. Paper presented at 2012 ASEE Annual Conference & Exposition, San Antonio, Texas. <https://peer.asee.org/21746>

TECHNICAL PRESENTATIONS

Invited Talks

“Problem Solving in Engineering”, DBER Group, University of Nebraska-Lincoln, Sep 15, 2016.

“Self-regulated Learning in Engineering Labs”, DBER Group, University of Nebraska-Lincoln, Feb 9, 2017.

“Measuring the cognitive demands of problems in undergraduate electrical engineering courses”, DBER Group, University of Nebraska-Lincoln, Sep 21, 2017.

PROFESSIONAL ACTIVITIES

Leadership

American Society for Engineering Education (ASEE), University at Buffalo
UB Campus Representative, January 2000 - present

Discipline-Based Education Research (DBER), University of Nebraska-Lincoln
Member, January 2016 - December 2017

Postdoctoral Advisory Council (PAC), University of Nebraska-Lincoln
Secretary, January 2017 - December 2017

Teaching & Learning in STEM community, University of Nebraska-Lincoln
Member, January 2016 – December 2017

Other Service

ASEE Annual Conference, Education and Research Method Division
Conference Reviewer

Frontiers in Education (FIE), Annual Conference
Conference Reviewer

IEEE Transactions on Education
Journal Reviewer

Advances in Engineering Education Journal
Journal Reviewer

Membership in Professional and Honor Societies

American Society for Engineering Education (ASEE)

UNIVERSITY SERVICE

Department Committees

Member of the Search Committee at UB for an academic position (Assistant Professor), 2018-2019.

Member of the Search Committee at UB for an academic position (Teaching Assistant Professor), 2019-2020.

Member of the Search Committee at UB for an academic position (Assistant/Associate Professor), 2022-2023.

SEAS Committees

Member, SEAS Scholarship Review Group, 2019, 2020, 2021, 2022.

University Committees

Member, UB Faculty Senate, period 2020-2022. 3