

## CURRICULUM VITAE

### Samuel A. Bonet Olivencia

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#### EDUCATION

**Texas A&M University, College Station, Texas** Current  
*PhD in Industrial Engineering*  
*Health and Human Systems Engineering*  
Cumulative GPR: 3.90

**University of Puerto Rico, Mayaguez, Puerto Rico** May, 2016  
*M.S. in Industrial Engineering*  
*Specialization in Systems Management*  
Cumulative GRP: 4.00

**University of Puerto Rico, Mayaguez, Puerto Rico** May, 2013  
*B.S. in Industrial Engineering*  
Cumulative GPR: 3.97; Major GP: 4.00

#### RESEARCH INTERESTS

My research interest mainly focuses on the study of the impact of the integration of healthcare technologies into clinicians' workflow, with an emphasis in telemedicine.

#### RESEARCH EXPERIENCE

**NSF Engineering Research Center – Precise Advanced Technology and Health Systems for Underserved Populations (PATHS-UP)**  
*PATHS-UP Fellow (Graduate Student)* December 2018 – Present

- Member of the user engagement team.

**Applied Cognitive Ergonomics (ACE) Lab – Farzan Sasangohar, PhD, Texas A&M University**  
*Graduate Research Student* December 2017 – Present

- Participate in the design of the clinician interface for a PTSD Smart System.
- Develop system models to framework the elements that lead to avoidable admissions in emergency departments.
- Study the impact of the integration of telemedicine into clinician workflow.

**Engineering Economics and Cost Optimization (E<sup>2</sup>CO) Research Team – Mayra Mendez, PhD, University of Puerto Rico, Mayaguez, P.R.**  
*Graduate Research Student* August 2014 – May 2016

- Developed a probabilistic cost model to estimate the cost expected value of no show in outpatient clinics.

*Undergraduate Research Student* August 2012 – December 2013

- Developed a risk analysis framework for transportation projects evaluated under public-private partnerships.
- Performed a Value for Money comparison with traditional economic analysis tools.

#### TEACHING EXPERIENCE

**Industrial and Systems Engineering Department – Texas A&M, College Station, Texas**

- Graduate Teaching Assistant – Human Factors and Ergonomics* January 2019 – Present
- Assist the students with the understanding of human factors and ergonomics concepts.
- Graduate Teaching Assistant – Systems Simulation* August 2016–December 2018
- Assist the students with the use of the Simio simulation software and the laboratory assignments.

**Industrial Engineering Department – UPRM, Mayaguez, Puerto Rico**

- Graduate Teaching Assistant – Work Systems Design Course* January 2016–May 2016
- Instruct the human factors and ergonomics laboratory.
- Graduate Teaching Assistant – Facilities Planning Course* August 2013 – December 2015
- Instruct the facilities planning laboratory using AutoCad, Factory, VIP Planopt and Google Sketch Up softwares.
- Graduate Teaching Assistant – Systems Simulation Course* January 2014–May 2014
- Grade the course assignments and assist the students with the use of the Simio simulation software.

**Puerto Rico Louis Strokes Alliance for Minority Participation-UPRM, Mayaguez, Puerto Rico**

- Assistant of the Campus Director January 2016–May 2016
- Assist the Campus Director with administrative activities and communications with the participant students.

**FUTURE FACULTY PROGRAMS ATTENDED**

- NSF ACADEME Workshop** June 2019
- Two-weeks teaching and research workshop for underrepresented minority PhD students interested in pursuing a career in Engineering Academia.

**PUBLICATIONS**

- Olivencia, S. B.** & Sasangohar, F. (2019). A Systems Approach into Unnecessary Admissions and Readmissions in Emergency Departments. *Proceedings of the Human Factors and Ergonomics Society 2019 International Annual Meeting*.
- Park, S., Wagle, N., Hammet, J., **Olivencia, S.**, Lawley, M., Sasangohar, F., Kum, H-C. (2019). Telemonitoring in Texas. Technical Report 2019-001-1.
- Bonet, S.**, Sasangohar, F. (2018) Investigating the Food and Drug Administration (FDA) Biotherapeutics Review and Approval Process: A Scoping Review. *Proceeding of the Human Factors and Ergonomics Society 2018 International Annual Meeting*.
- Colon Velez, W., **Bonet-Olivencia, S.**, Ferrer, M., Torres-Garcia, W. (2018). A Decision Support System for Establishing a Freshman Admission Quota. *Proceeding of the 2018 ISERC Conference*.
- Bonet-Olivencia, S.**, Méndez-Piñero, M. (2015). Estimating the Patients Waiting Time Cost to an Outpatient Clinic Using Overflow Probabilities. *Proceeding of the 2015 SISE Conference*.
- Bonet-Olivencia, S.**, Méndez-Piñero, M. (2015). Probabilistic Cost Model to Estimate the Cost Expected Value of No-Show in Outpatient Clinics. *Proceeding of the 2015 LACCEI Conference*.
- Niño, E., Rosas, J.F., **Bonet, S.**, Ramírez, N., Cabrera-Ríos, M. (2015). Multiple Objective Optimization Using Desirability Functions for the Design of a 3D Printer Prototype. *Proceeding of the 2015 ISERC Conference*.
- Dávila, S., Cruz, M., García, T., **Bonet, S.**, Ruiz-Vélez, R. (2015). Global Ranks in High-Dimensional Tsunami Exposure Indexes. *Proceeding of the 2015 ISERC Conference*.

**POSTER PRESENTATIONS**

- Graduate Research Presentation**, Houston HFES One-Day Symposium April 2019  
Poster: “A System Approach into Unnecessary Admissions and Readmissions in Emergency Departments.”
- Graduate Research Presentation**, HFES in Healthcare Symposium March 2019

Poster: "A System Approach into Unnecessary Admissions and Readmissions in Emergency Departments."

**Graduate Research Presentation**, Houston HFES One-Day Symposium April 2018  
Poster: "Investigating the Food and Drug Administration (FDA) Biotherapeutics Review and Approval Process: A Scoping Review"

**Graduate Research Presentation**, 2015 ISERC Conference May 2015  
Poster: "Estimating the Cost Expected Value of No-Show in Outpatient Clinics"

**Undergraduate Research Presentation**, 2013 ISERC Conference May 2013  
Poster: "Value for Money Comparison with Traditional Economic Analysis Tools"

**Undergraduate Research Presentation**, 2013 NEA Science Day January 2013  
Poster: "Value for Money Comparison with Traditional Economic Analysis Tools"

### PROFESSIONAL ASSOCIATIONS

**Human Factors and Ergonomics Society (HFES)**, Active Member January 2018 – Present  
**Informs**, *Active Member* August 2017 – Present  
**Alpha Pi Mu Honor Student Society**, Member May 2012 - Present

### HONORS

Third Place – 2018 Simio Student Competition May 2018  
2015 Best Student Paper Award (SISE 2015) October 2015  
Honor Student in the Industrial Engineering Department April 2011  
Golden Key Honor Society Student February 2010

### SKILLS

Computer: MS Office, Power Point, Excel, Simio, MedModel, Google Sketch Up, AutoCAD, Factory, VIP Planopt, AIMMS, Lingo, R and Minitab.  
Language: Spanish and English