

# Bryan Ortiz-Torres

Research Assistant

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📍 1513 Unv Ave, Madison, WI 53706



## Education

### Ph.D.

May 2022 - Present

### University of Wisconsin Madison

Industrial & Systems Engineering

### BSc.

Aug 2016 - May 2022

### University of Puerto Rico at Mayagüez

Industrial Engineering - *Magna Cum Laude*

## Teaching Experience

### Teaching Assistant & Lab Instructor

Jan 2022 – May 2022

### Industrial Engineering Department, UPRM | Dr. David González-Barreto

ININ 4078: Quality Control

- Assisted professor and students in the Statistical Quality Control course.
- Prepared materials and conducted laboratory class for 35+ students.
- Graded undergraduate student's exams and laboratory reports.

### Teaching Assistant

Jan 202021 - Dec 2021

### Industrial Engineering Department, UPRM | Dr. Mayra Mendez-Piñero

ININ 4015: Engineering Economic Analysis

- Helped the professor in the design of exams and assignments for the class.
- Graded students exams and assignments.

## Research Experience

### DAtABioMS

Researcher

Aug 2019 – May 2022

### Automated Cut-off Feature Selection Approach (UPRM)

Advisor: Dr. Wandaliz Torres-García

- Worked on a research area that aims to fine-tune an innovative automatic cut-off feature selection methodology using omics data.

### Molecular Characterization of Chimeric Antigen Receptor T-Cells (UPRM)

Advisor: Dr. Wandaliz Torres-García

- Intending to characterize important attributes of cellular therapies that will help monitor safe and potent treatments early in their manufacturing process implementing unsupervised learning techniques to assess donor-to-donor variability.

### Researcher

Jan 2021 - May 2021

### Study of Emotion and Social Media Consumption in Puerto Rico (UPRM)

Advisor: Dr. Saylisse Dávila

- Aimed to explore emotions and consumption in social media between users in Puerto Rico using Sentiment Analysis, Unsupervised Learning, and data from Twitter API.

## Researcher

June 2021 - Aug 2021

## Performance Assessment of PR-22 Dynamic Toll Lanes (UPRM)

Advisor: Dr. Alberto Figueroa & Daniel Rodríguez

- Performed regression and classification analysis to identify important characteristics of dynamic toll lane users in Puerto Rico.

## Industry Experience

### Capstone Design Student

Jan 2022 – May 2022

### Edwards Lifesciences | Añasco, Puerto Rico

Supervisor: Mara Ruiz & Dr. Lourdes Medina

- Designed, planned, and executed an engineering experiment to meet quality standards.
- Performed a time study and ergonomic evaluation to assess new production line needs.
- Created a discrete simulation to match the desired production rate of the line by using line balancing.

### Global Planning Coop

Aug 2021 - Dec 2021

### Ethicon LLC (Johnson & Johnson) | Guaynabo, Puerto Rico

Supervisor: Dr. Aixa Cintrón

- Worked in the creation of finished goods, inventory costs, production schedules and consumption projections reports for the Planning Division used to take decisions in the Global Supply Chain Network.

### Supply Chain Coop

Jan 2020 - Aug 2020

### Merck & Co., Inc. | Las Piedras, Puerto Rico

Supervisor: Dr. José Rivera

- Designed a standard and sustainable approach methodology to improve laboratory efficiency and lead time up to 80% while reducing overtime costs as part of a global initiative to achieve world class performance.
- Enhanced communication channels between manufacturing and quality divisions by designing a more efficient tier process.
- Applied and analysed KPI's of the laboratory and worked in the creation of Bill of Materials.

### Project Student

Jan 2021 - May 2021

### Villa Design | Aguada, Puerto Rico

Advisor: Dr. Cristina Pomales

- Proposed a time study, a layout design, and a prediction model to standardize work and establish compensations to improve the company's profits and performance.

### Project Student

Jan 2021 - May 2021

### INDULAC Inc. | San Juan, Puerto Rico

Advisor: Glorimar López

- Developed an ergonomic evaluation of one of the industry's tasks using RULA, REBA and NIOSH equation to propose recommendations considering the limits and capacities of the institution.

## Projects

Dec 2021

### Allocation of Resources for a Blood Bag production line: A Discrete Event Simulation Approach

- Used discrete event simulation methodology to study and redesign a Blood Bag production line facing an increase in demand.

May 2021

### **The Outdoor Footwear Co, Inc: Facilities Layout Design**

- Proposed a more efficient layout by reducing the traveled distance between departments and transportation costs by at least 26% using the Systematic Layout Planning methodology

## **Awards & Honors**

Feb 2022

GERS Fellowship (UW-Madison)

Aug 2018 – May 2022

Honor Roll Department of Industrial Engineering (UPRM)

Aug 2019 – May 2022

Puerto Rico Louis Stokes Alliance for Minority Participation (PR-LSAMP)

- Receiver of a scholarship, sponsored by NSF, which aims to help minority STEM students continue graduate studies.

Nov 2020

Boston Scientific Scholarship

- Recipient of this scholarship due to my academic achievement and interest in the medical devices industry.

Oct 2018 – May 2022

Engineering Pearls Program (UPRM)

- Chosen among 90 of 2,000+ students to be part of a college-wide initiative, sponsored by NSF, to receive individualized career mentoring, soft-skills training, and peer-mentor activities.

Aug 2016

Credicentro Coop Scholarship

- Awarded this academic scholarship due to my outstanding academic result and promotion of cooperative values.

Aug 2016

Mayor's Scholarship

- Sole receiver of an academic based scholarship by being the top-ranking student in my hometown.

## **Leadership & Organizations**

### **Member**

Aug 2019 – May 2022

DAtABioMS Research Group

### **Member**

Jan 2021 – May 2022

Socially Responsible Operations Center

### **Guidance Counselor**

Aug 2017 – May 2022

Counseling and Psychological Services Department

### **Councilor**

Aug 2017 – May 2021

Faculty of Engineering Students Council

### **Mentor**

Jan 2019 – Dec 2019

Peer-Lead Team Learning (PLTL)

### **Project Manager**

Aug 2018 – Dec 2018

Colegio Racing Engineering – FSAE UPRM

### **Logistics Coordinator**

Jan 2018 – May 2018

Society of Hispanic Professional Engineers (SHPE-UPRM)

**Vice President & Co  
Founder**

Jan 2014 – May 2016

El Cemí Barranquiteño Cooperative

**Regional Vice  
President**

Aug 2014 – May 2016

Future Business Leaders of America

## Coursework

**Graduate  
Undergraduate**

Data Mining, Systems Simulation  
Applied Statistics, Statistical Quality Control, Design of Experiments, Production  
Systems, Operations Research, Engineering Economic Analysis, Cost Management,  
Ergonomics, Work Measurement, Facilities Planning & Real Time Process Control

## Additional Skills

**Statistical Tools  
Programming  
Applications  
Languages  
Trainings**

R Studio, Minitab  
Python, C, Matlab, SQL & Lingo  
Simio, AutoCAD, Fusion 360, SketchUp, SAP, Productivity (Automation Direct)  
Spanish (native), English (proficient)  
cGMP's, Data Integrity, Industrial Safety

## Conferences & Workshops

**Nov 2021**

OPPS University of Wisconsin-Madison

**Sep 2021**

IOE Graduate School Workshop University of Michigan

**Apr 2021**

Junior Technical Meeting & the Puerto Rico Interdisciplinary Scientific Meeting (PRISM)

**Sep 2020**

O4U Engineering Conference

**Mar 2019**

Goldman Sachs Pride Summit

## References

**Dr. Sonia Bartolomei**


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**Dr. David González**

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**Dr. Wandaliz Torres**

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