LAYLA BOUZOUBAA

Public Health - data science, visualization, engineering

🎓 EDUCATION

2015–2016

University of Miami Miller School of Medicine
M.S. Public Health cn. Biostatistics   📍 Miami, FL

2009–2014

Georgia Institute of Technology
B.S. Industrial & Systems Engineering   📍 Atlanta, GA

💼 PROFESSIONAL EXPERIENCE

2019–present

Lead Research Analyst
University of Miami Miller School of Medicine   📍 Miami, FL

- HEALing Communities Study Analyst - address opioid misuse use disorder (OUD)
- Build Shiny App to visualize community characters and map of naloxone facilities
- Design and disseminate statistical reports and visualizations by community with R and R Markdown
- Process population data for NY communities using the US Census Bureau via API
- Create maps from shapefiles (tigris) and overlay various population health risk factors
- CTN0094 Analyst- Predict response to OUD treatments
- Spell Checker Shiny App to harmonize and standardize drug names
- SCAN360.com Project Manager
- University of Miami COVID-19 Contact Tracking and Tracing Committee Principal Analyst

  - Serological testing dashboard for Miami-Dade County
  - UM COVID-19 dashboard

- Observing COVID-19 policy adoption in collaboration with the University of Miami Institute for Advanced Study of the Americas, led by Dr. Felicia Knaul, and Universidad Anáhuac in Mexico

  - OBSERVATORIO PARA LA CONTENCIÓN DEL COVID-19 EN AMÉRICA LATINA

2017–2019

Biostatistician Programmer
University of Miami Miller School of Medicine - Sylvester Comprehensive Cancer Center
📍 Miami, FL

- Acquire & process population data from various sources
- Calculate various measures of cancer burden including age-adjusted incidence, mortality, survival rates
- Prototype new data sources via Shiny App and R package development

CONTACT INFO

- ✉ layla.bzb@gmail.com
- 🐙 github.com/labouz
- 📞 +1 404-409-4968
- 🐦 bouzoulay
- 💼 layla-bouzoubaa
- 🌐 laylab.me

SKILLS

Expert in R and R Studio with emphasis on the Tidyverse.

Expert in developing Shiny applications with custom HTML/CSS components

Expert in communicating to scientific and general public

Supervised and Unsupervised Machine learning algorithms: SVM, KNN, Regression, Decision Trees, Clustering methods, NLP, Market Basket Analysis / Open-source libraries: TensorFlow

Web scraping, data wrangling, data visualization

Package & API development

Git & Github

Google Cloud Platform: Compute Engine, AutoML, BigQuery, APIs, Data Studio

Some Python and a keen understanding of SQL

Some Adobe Illustrator, ArcGIS Pro

2014–2015

Epidemiology Researcher

Université Sidi Mohamed Ben Abdellah Faculté de Médecine et de Pharmacie

📍 Fes, Morocco

- Statistical consulting
- Literature reviews for a multitude of research initiatives

2013–2014

Content Developer

Great Parents Academy   📍 Atlanta, GA

- Develop digital lessons that were integrated into the educational supplemental software - XML

✷ CERTIFICATIONS

2020

Google Analytics
Google Academy

2019

Associate Cloud Engineer
Google Cloud

2017

Applied Statistics
Pennsylvania State University

</> SOFTWARE

2020

DOPE
Drug Ontology Parsing Engine.
https://cran.r-project.org/web/packages/DOPE/index.html

🖥 SELECTED TEACHING EXPERIENCE

2019–

Data Science & Machine Learning for Health Research

University of Miami Department of Public Health Sciences📍 Miami, FL

- Developed curriculum to a Biostatistics course to teach computational data science methods to graduate students in a modular format that follows the basic components of a data pipeline. Primary topics taught: version control with git and GitHub, building Shiny applications - theory and applied, building interactive visualizations, working with geospatial data.

💬 INVITED LECTURES & PRESENTATIONS

March 2021

Introduction to Data Science with the R Programming Language

Workshop given to the attendees of the NSF Re-enter STEM Through Emerging Technology (RESET)

📍 Online

L Bouzoubaa

March 2020

Introduction to R Markdown
Workshop to R-Ladies community on how to create a prepare R Markdown files within RStudio for presentations and publication ready text, output & visualizations

📍 Miami, FL

L Bouzoubaa

Feb 2020

Tearing Down Barriers to Publication with R Markdown
Seminar presented to Florida International University graduated students on how to use R for publications, dissertations, blogs using packages such as rmarkdown, knitr, bookdown, pagedown, xariangan

📍 Miami, FL

L Bouzoubaa, R Balise

Aug 2016– Dec 2016

Guest Lecturer and Computing Lab Instructor
University of Miami Department of Public Health Sciences - Medical Biostatistics Topics: methods in experimental and non-experimental epidemiological studies

📍 Miami, FL

L Bouzoubaa, A Gauri

📄 SELECTED PUBLICATIONS

2020

Gender disparities in lung cancer survival from an enriched Florida population-based cancer registry
Annals of Medicine and Surgery. doi:10.1016/j.amsu.2020.11.081
A Elkbuli, MM Byrne, W Zhao, M Sutherland, M McKenney, Y Godinez, DJ Dave, **L Bouzoubaa**, T Koru-Sengul

2020

SCAN360: A Resource for a 360-Degree View of Cancer Prevention, Risk, and Survival
Preventing Chronic Disease (2020). doi:10.5888/pcd17.200263
Z Bailey, R Balise, **L Bouzoubaa**, E Kobetz

2019

Emergent high fatality lung disease in systemic juvenile arthritis
Annals of the rheumatic diseases (2019). doi:10.1136/annrheumdis-2019-216040
Saper, V, G Chen, G Deutsch, R Guillerman, J Birgmeier, K Jagadeesh, S Canna, G Schulert, R Deterding, J Xu, AN Leung, **L Bouzoubaa**, …,P Khatri, ED Mellins

2019

Risk of Cancer Death Among White, Black, and Hispanic Populations in South Florida
Prev Chronic Dis (2019). doi:10.5888/pcd16.180529
P Pinheiro, K Callahan, T Koru-Sengul, J Ransdell, **L Bouzoubaa**, CP Brown, E Kobetz

2018   **The Impact of Immediate Salvage Surgery on Corporeal Length Preservation in Patients Presenting with Penile Implant Infections**
J. Urol. (2018). doi:10.1016/j.juro.2018.01.082
D Lopategui, R Balise, **L Bouzoubaa**, S Wilson, and B Kava

2018   **Cancer patterns and trends in Costa Rica: A population-based tumor registry study**
J. Clinical Oncology (2018).
doi:10.1200/jco.2018.36.15_suppl.e13605
O Picado, JB Bispo, **L Bouzoubaa**, RR Balise, G Lopes, E Kobetz

2018   **Cervical cancer sociodemographic and diagnostic disparities in Florida: a population-based study (1981–2013) by stage at presentation**
Ethnicity & Health (2018). doi:10.1080/13557858.2018.1471669
A Gauri, SE Messiah, **L Bouzoubaa**, KJ Moore, T Koru-Sengul

👥 ACTIVE OUTREACH

GitHub Campus - Advisor

R-Ladies Miami - Organizer

Google Developer Groups Miami - Organizer

Google WomenTechMakers - Ambassador

Google #IamRemarkable - Facilitator