ARDALAN MIRSHANI

I am a **Data Scientist** and **Statistical web app developer** with an interest on creating scientific tools, reproducible workflows, and automating repetitive tasks that arise during all data wrangling, exploring, visualizing, modeling, and reporting processes.

PROFESSIONAL EXPERIENCE

Present | 10-2019

Sr Expert Data Science
Novartis ⚲ Cambridge, MA

· Creating generalizable and reusable statistical tools, advance interactive visualizations, automation workflows, high performance computing, scientific reproducible templates and reports for analytics activities.
· Developing production-grade shiny apps, modules, and R-packages to support exploratory machine learning projects.
· Designing educational training materials and consulting for internal quantitative scientists.

08-2018 | 05-2018

Shiny app developer (Internship)
Novartis (Recommendation) ⚲ Cambridge, MA

· Implementing modularized R Shiny apps for analyzing clinical trials.

2016

Statistical Consultant
PSU Statistical Consulting Center ⚲ University Park, PA

· Applications of statistical methods in the consulting environment.

EDUCATION

2019 | 2014

PhD, Statistics
Pennsylvania State University ⚲ University Park, PA

· Thesis: Regularization Methods in Functional Data Analysis

2013 | 2011

M.Sc, Mathematics
Sharif University of Technology ⚲ Iran

2011 | 2006

B.Sc, Electrical Engineering
KNTU ⚲ Iran

CONTACT INFO

✉ ardeeshany@gmail.com
🏠 mirshani.com
🐦 ArdalanMirshani
⌕ ardeeshany
in mirshani

PROGRAMMING

💻 **Web development:** Expert in {Shiny} + HTML/CSS/JS, {blogdown}

🤖 **Automation Environment:** R-pkg dev, Workflow pkgs {usethis, golem, targets}, {renv}, {testthat}, {profvis}, chatty functions

📘 **Reproducible Reporting:** {rmarkdown}, {bookdown}, {pagedown}, Latex

📊 **Interactive Visualizations:** ggplot2, htmlwidgets pkgs {DT, Plotly, Leaflet, etc.}, {gt}

🔍 **Data Exploration and Wrangling:** Fan of {tidyverse}, Efficient coding advocate.

📦 **Modeling and Machine Learning:** {Tidymodels} Framework

⑂ **Workflow:** git, GitHub, Travis/Runner, agile

💻 FREELANCE EXPERIENCE

Now
|
2019

Brand Loyalty Lab

A series of research and development on retail market brand loyalty.

2018
|
2017

RAAVI

A complicated modularized Shiny app for analyzing students' scores.

✦ CERTIFICATES

2020
|
2018

Data Science

DataCamp (Certificates)

· Exploring +40 `Datacamp` courses on the state of the art pkgs in Data wrangling, visualizing, modeling, reporting, Big data, databases, and more for thinking and coding more efficient.

📰 RESEARCH EXPERIENCE

2020
|
2018

Adaptive function-on-scalar regression with a smoothing elastic net
Submitted to JMVA (Article)

· {AFSSEN} R-Package: A very fast coordinate descent algorithm (`C++` backend) for running function-on-scalar regression in high-dim data.

2019

Formal privacy for functional data with gaussian perturbations
ICML 2019 (Article)

· Developed a Shiny app for exploring privacy in 3D facial data.

🖥 TEACHING EXPERIENCE

2008

Lecturer: Probability, statistics and Calculus

Tehran Virtual University   📍 Iran

🏆 AWARDS

2020

CD&A Best Poster Presentation Awards

A Shiny app for exploring safety and efficacy of Heme data   📍 Novartis

2017

Rao Prize Best Poster Presentation Awards

Privacy in functional data analysis   📍 PSU

2011

Silver Medal

35th Iranian National Mathematics Competition for university   📍 Iran

Other Languages:

🐍 **Python:** My second language, {reticulate}

</> **Julia:** Exploration

>_ **Script:** Bash

Cheatsheet

☰ Parallel Computing: Contributed to RStudio Cheatsheet

Everyday Learning:

🐦 **R Community:** Following `#TidyTuesday`, `#Rstats`, `#dataviz`, `#RLadies`, Screencasts

Made with pagedown

Source code from nstrayer

Last updated on 2020-11-24.