# AMIN SHIRAZI

## CONTACT INFORMATION

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GitHub: https://github.com/ashirazist

## PROFESSIONAL SUMMARY

- PhD student with bachelor and master background in statistics
- Successfully developed an R package in collaboration with 4 other graduate students
- Data analyst with more than 4 years technical work experience in research and development department of 3 companies
- Successfully collaborated with sales, marketing, customer service and logistic departments in my career
- Technical and educational consulting experience in industry and academia
- Advanced computer skills to write objective-oriented codes with R and SAS

## TECHNICAL AND ADVANCED COMPUTER SKILLS

- Numerical and Data Analysis: R, SAS, JMP, currently learning SQL, Spark and Scala
- Reporting: LaTeX, Markdown, Sweave (integration of R codes into LATEX), HTML, Shiny
- Content Management: Git

## EDUCATION

Doctor of Philosophy (PhD)

    Department of Statistics,                                   Aug. 2017 – present
    Iowa State University (ISU), Ames, IA
    Advisor: Peng Liu

Master of Science (MSc)

    Department of Statistics,                                   Sep. 2011 – Feb. 2014
    Faculty of Mathematical Science, Shahid Beheshti University, Tehran, Iran
    Advisors: Hamideh D. Hamedani, AriReza Taheriyoun

Bachelor of Science (BSc)

    Department of Statistics,                                   Sep. 2006 – Sep. 2010
    Faculty of Science, IKIU, Qazvin, Iran
    Advisor: Afshin Fallah

## EXPERIENCE

Graduate Research and Teaching Assistant                            Aug. 2017 - present
Department of Statistics, Iowa State University, Ames, Iowa

- Statistical Data Analysis of Big Data: Applying integrated data analysis on -Omics data using heterogenous network based and Bayesian based methods
- High dimensional data sets cleaning utilizing SQL and R
- Collaboration with aerospace department for statistical data analysis in two industrial articles
- Course instructor for STAT 305 (Engineering Statistics) https://ashirazist.github.io/stat305.github.io/index.html with approximately 70 students.
- Course co-instructor for STAT 588 (Statistical Theory for Research - Graduate level) with approximately 30 students
- Teaching assistant for STAT 330 (Probability and Statistics for Computer Science), STAT 226 (Introduction to Business Statistics) and STAT 305 (Engineering Statistics) with approximately 75 students in average

Research Assistant                                                                    Mar. 2014 – Jan. 2017
Shahid Beheshti University, Tehran, Iran

- Leader of a research group of 6 graduate and undergraduate students to gather, clean and analyze stock market data
- Model selection for stock market data using statistical hypothesis testing
- Applying statistical methods to 100+ stock market data sets using R to evaluate model robustness

## PUBLICATIONS

- Amin Shirazi, Hamideh D. Hamedani, ''Model Selection for Stock Market Using Statistical Hypothesis Testing ", The First FINACT conference of Mathematical Finance and Actuary", Institute for Research in Fundamental Sciences (IPM), Oral presentation, (August 2014)

## ARTICLE IN PREPARATION

- Mohammad Jafari, Fangwei Hou, Amin Shirazi, Mostafa Hassanalian, "Determination of Experimental/Numerical Errors on Identification of Flutter Derivatives for a NACA 0020 Airfoil", AIAA SciTech Forum and Exposition (in review)
- Mohammad Jafari, Fangwei Hou, Amin Shirazi, "Experimental Identification of Aeroelastic Wind Load Parameters with Uncertainty: Design of Experiment Method"
- Mohammad Jafari, Fangwei Hou, Amin Shirazi, "Sensitivity Analysis of Effective Parameters and Prediction of Across-wind Response of Tall Buildings in Time Domain"
- Amin Shirazi, Hamideh D. Hamedani, "Can Noise Pollution Be Modeled by Pure Jump Processes?"
- Ali Sharifi, Hamideh D. Hamedani, Amin Shirazi, "Statistical Hypothesis for Continuous-Time Processes"

## SOFTWARE DEVELOPMENT
PetFindr

PetFindr provides an R interface for the Petfinder.com API (V2). Once a user obtains an API key and secret from Petfinder, this package allows the user to retrieve information about animals by type, breed, location, and other useful characteristics. This package was developed in a team of the five of us at Iowa State University as a part of STAT 585 project. Find more documentation https://earl88.github.io/PetFindr/index.html

## JOB EXPERIENCE

Data Analyst, R&D department                                    Jul. 2015 – Jul. 2017
Koosha Setareh Iranian International Co, Tehran, Iran

Job descriptions:

- Using statistical techniques to interpret market data in close collaboration with sales department and marketing department
- Predicting demands for products and services
- Sales analysis and predicting future trends using data analytical methods
- Generating creative business reports, tables, charts, and graphs for the logistic department and management board

Data Analyst, R&D department                                    Sep. 2014 – Jun. 2015
Iranian Shaygan Pars, Tehran, Iran

Job descriptions:

- Interpreting sales data utilizing statistical models as a teamwork with sales department
- Presenting results to senior managers and regulatory authorities
- Predicting demands for products and services
- Collecting data to monitor levels of progress in sales and customer satisfaction

Statistical Consultant and Data Analyst                          May 2014 – Sep. 2014
Info Tech International Company, Tehran, Iran

Job descriptions:

- Designing opinion polls to collect data, and then interpreting them, using R to identify trends and relationships within the data
- Conducting tests to find out the data's validity and to account for high survey nonresponse rates or sampling error
- Giving consultant to call center managers on how to collect, organize and analyze customer service data

Director Consultant and Technical Instructor                     Sep. 2011 – Apr. 2012
Mahestan Educational Institute, Tehran, Iran

Job descriptions:

- Teaching statistical topics and necessary course books
- Designing quizzes to assess the effects of teaching methods and associated development in students' skills

## SERVICE AND LEADERSHIP SKILLS

Statistics in the Community (StatCom) Executive Committee                    Aug. 2019 – present
Department of Statistics, Iowa State University, Ames, Iowa

STATCOM at Iowa State offers statistical advice and expertise free of charge to governmental and nonprofit groups in the local community

- Currently working on a project with Ames Public Library to conduct and analyze a survey on their services to library members


Student representative to departmental faculty meetings                    Aug. 2019 – present
Department of Statistics, Iowa State University, Ames, Iowa

- Communicate relevant information from the student association to the faculty members
- Give students' feedback of the departmental decisions


Treasurer                                                                  Aug. 2018 – Aug. 2019
Iranian Students and Scholars' Association, Iowa State University, Ames, Iowa

- Holding 5 big events for the members of the association and their family, guests and non-Iranian people
- Organizing the new year celebration event for approximately 300 people
- Communicated with finance committee and senate of Iowa State University for getting funds to hold events

## PROFESSIONAL AFFILIATIONS

- American Statistical Association (ASA), Institute of Mathematical Statistics (IMS)
- Iranian Statistical Society (ISS)