AMIN SHIRAZI

Ames, Iowa

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PROFESSIONAL SUMMARY

- Research assistant at the Consulting Group, Department of Statistics, Iowa State University
- Biostatistics graduate intern at Merck & Co, Summer 2020 and Summer 2021
- Biostatistics graduate intern at ClinChoice, Programming Division, Fall 2020 & Spring 2021
- 4+ years industry experience in data analysis in research and development department of 3 companies
- Successfully collaborated with sales, marketing, customer service and logistic departments
- Advanced computer skills to write objective-oriented codes, develop packages, and shiny apps in R
- R package development contribution: gsDesign, gsDesign2, gsdmvn, simtrial, pkglite, r2rtf, PetFindr
- R shiny development: Merck Oncology Shiny (see this to have an idea of what the oncology shiny I developed looks like), Merck Programming System Tracking Dashboard (using plotly), Merck Adaptive two-in-one Design shiny, PetFindr shiny
- Winner of Teaching excellence award (2020) and Daniel H. Mowrey Graduate Consulting Awards (2021)
- Former treasurer and Executive board member of Statistics in Community, a student-run organization

TECHNICAL AND ADVANCED COMPUTER SKILLS

- Numerical and Data Analysis: R, SAS, JMP
- Reporting: LaTeX, Markdown, Sweave, HTML, Shiny
- Content Management: Github, Bitbucket

EDUCATION

Doctor of Philosophy (PhD), Statistics　　　　　　　　　　**August. 2017–May 2022**
　　Department of Statistics,
　　Iowa State University, Ames, IA

Master of Science (MSc), Mathematical Statistics　　　　　**September 2011–February 2014**
　　Department of Statistics, Faculty of Mathematical Science,
　　Shahid Beheshti University, Tehran, Iran

Bachelor of Science (BSc), Statistics　　　　　　　　　　**September 2006–September 2010**
　　Department of Statistics,
　　Faculty of Science, IKIU, Qazvin, Iran

EXPERIENCE

Statistical Consultant　　　　　　　　　　　　　　　　　**January 2021-present**
Consulting group, Department of Statistics, Iowa State University, Ames, Iowa
1. Providing advice to researchers about their research designs, choosing statistical methods, interpreting statistical analysis results, use of statistical software to analyze data

Teaching and Research Assistant　　　　　　　　　　　　**August 2017-present**
Department of Statistics, Iowa State University, Ames, Iowa
1. Genomics and microbiome data analysis: Analysis of gene expression data
2. Course instructor of record for Engineering Statistics with approximately 70 undergraduate students (Fall 2019-Spring 2020)
3. Course co-instructor for Statistical Theory for Research with 30 graduate students (Spring 2019)
4. Teaching assistant for Probability and Statistics for Computer Science, Introduction to Business Statistics and Engineering Statistics with 75 undergraduate students in average (Fall 2017–Fall 2018)

Stock Market Research Assistant　　　　　　　　　　　　**March 2014–January 2017**
Shahid Beheshti University, Tehran, Iran
1. Leader of a research group of 6 students to gather, clean and analyze stock market data
2. Model selection for stock market data using statistical hypothesis testing

PACKAGE DEVELOPMENT

pkglite: a tool, grammar, and standard to represent and exchange R package source code as text files

gsDesign2: non-proportional hazards and graphical multiplicity control with group sequential design

r2rtf: an R package to create production-ready tables and figures in RTF format

gsdmvn: simulation of fixed or group sequential design under non-proportional hazards

simtrial: this package provides some basic routines for simulating a clinical trial
 gsDesign: the gsDesign package supports group sequential clinical trial design
 PetFindr: an R interface for the petfinder.com API (V2)
OTHER: Merck Oncology Analysis package, Merck qualification package, Merck Adaptive two-in-one package

JOB EXPERIENCE

Biostatistics Graduate Intern, Late Development Statistic Group   **May 2021–August 2021**
Merck & Co, PA, USA

1. Developer of Merck & Co internal packages: Oncology Survival Analysis package (mksurv), Qualification package (mkqualify), and Merck Adaptive two-in-one Design package
2. Creator and developer of three shiny apps for Merck internal resources: Oncology survival analysis shiny (see this to have an idea of what the oncology shiny I developed looks like), Statistical programming managerial dashboard for project monitoring using ggplotly, and a shiny app for adaptive two-in-one studies (for oncology trials)

Biostatistics Graduate Intern, Biostatistics and Programming Division   **September 2020–May 2021**
ClinChoice, PA, USA

1. Developing unit tests for Group Sequential Design packages
2. Simulation studies for oncology clinical trials

Biostatistics Graduate Intern, Design Methodology Division   **June 2020–September 2020**
Merck & Co, PA, USA

1. Collaboration in package development at Merck & Co. in 3 packages: simtrial, gsDesign2 and gsdmvn
2. Simulation studies for fixed and group sequential designs under non-proportional hazard assumption
3. Research in design methodology for group sequential designs for time-to-event endpoint trials

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

1. Benefited statistical skills to interpret market data in corporation with sales and marketing department
2. Modelling generalized linear model to data from market research
3. Generated creative business reports, tables, charts, and graphs for the logistic department

Data Analyst, R&D department   **September 2014–June 2015**
Iranian Shaygan Pars, Tehran, Iran

1. Interpreted sales data applying statistical models as a teamwork with sales department
4. Generated creative business reports, tables, charts, and graphs for the logistic department

Statistical Consultant and Data Analyst   **May 2014–September 2014**
Info Tech International Company, Tehran, Iran

1. Conducted tests for survey data validation using statistical knowledge and analytical methods
2. Call center consultant for designing, collecting and analysis of customer satisfaction survey

HONORS AND AWARDS

1. Daniel H. Mowrey Graduate Consulting Awards, (Spring 2021), Iowa State University
2. Teaching excellence award (Spring 2020), Iowa State University

SERVICE AND LEADERSHIP SKILLS

Statistics in the Community, Former Treasurer and Executive member   **August 2019–present**
STATCOM at Iowa State offers statistical advice and expertise free of charge to governmental and nonprofit groups in the local community

Statistics faculty committee - student representative   **August 2019–May 2021**
Department of Statistics, Iowa State University, Ames, Iowa

- Communicate relevant information from the student association to the faculty members

Iranian Students and Scholars' Association, Treasurer, ISU   **August 2018–August 2019**

- Event planner for 5 big events for the members of the association and non-Iranian people
- Organized the new year celebration event and hosted approximately 300 people
- Communicated with finance committee and senate of Iowa State University for funds to hold events

PROFESSIONAL AFFILIATIONS

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