Soheil (Sol) Sadeghi

EXPERIENCE

Data Scientist at **Microsoft**

Health Score 2019–current

Developing the core methodology for measuring and evaluating the holistic health of Windows devices using user initiated signals, diagnosability data, hardware characteristics, and application attributes.

Experimentation 2017–2018

Developed and helped operationalize a long-term estimator for the causal effect of online experiments. This model detects, estimates, and corrects for the novelty and learning effects which reduces the experimental bias and contributes to trustworthiness of experimentation.

Data Scientist Intern at **Microsoft**

Operations Research 2016

Developed and helped operationalize the infrastructure for measuring and improving an engineering systems productivity power metric. This metric measures the agility of engineering systems in responding to customer feedback. The infrastructure decomposes the cyclicality pattern from the metric as a time series to provide forecast and to identify the key engineering factors that improve the system.

Data Scientist Intern at **@Walmartlabs**

Cannibalization and Halo Effects 2015

Developed a machine learning algorithm for scalable assessment of cross category promotion effects using Sam's Club data

Research Assistant at **University of Wisconsin-Madison**

Design of Experiments 2013–2017

Efficient statistical designs for online experiments while dealing with large number of potential factors across different platforms.

Data Division 2015

Optimal division of large and complex datasets into homogeneous batches and allocation to different servers in order to do parallel computing.

Search Engine Optimization 2014

Keyword optimization on Google AdWords data and designing experiments to fill empty spaces in order to improve conversion profitability.

Predictive Modeling 2014

Predictive response modeling effort in between two waves of mailings to QuickBooks customers with the aim of improving wave-two response rates and company profits.

Ranking Algorithms 2013

Ranking hotels across different queries based on customer behavior on a dataset from Expedia.com using machine learning algorithms.

SKILLS

Statistical Packages: R, SAS

Programming: Python

Others: Spark, Hive, SQL, Visual Studio, Office

EDUCATION

University of Wisconsin-Madison 2013–2017
Doctor of Philosophy, **Major**: Statistics, **Minor**: Computer Science

University of Florida 2011–2013
Master of Science, **Major**: Statistics

Sharif University of Technology 2007–2011
Bachelor of Science, **Major**: Industrial Engineering

HONORS AND ACHIEVEMENTS

Research and Graduate Program Fellowship (Grinter Award), and **Outstanding Academic Achievement Certificate**, University of Florida, 2011–2013

Ranked **1st** among **80** students in Department of Industrial Engineering, and awarded direct entrance to the graduate program with full scholarship by Dean of Graduate Studies at Sharif University of Technology, 2010

Ranked **311th** among more than **300,000** students in the nationwide University Admission Examination (**99** Percentile), 2007

SELECTED PUBLICATIONS

Sadeghi, S., Chien, P., and Arora, N. (2019). **Sliced Designs for Multi-platform Online Experiments**, *Technometrics*, (just-accepted), pp. 1-34

Sadeghi, S. and Carey, J. (2017). **Phase-based Cyclic Time Series Forecasting**, *Microsoft Journal of Applied Research (MSJAR)*, Volume 8, pp. 91-100

INVITED TALKS

Math Sciences at The University of Memphis (ICODOE 2019)
Novelty and learning effects in online experiments 2019

UCLA Department of Statistics (DAE 2017 Conference)
Sliced designs for multi-platform online experiments 2017

UT-Dallas Naveen Jindal School of Management (Bass FORMS Conference)
Sliced designs for multi-platform online experiments 2017

Stanford Graduate School of Business (Digital Marketing Conference)
Sliced designs for multi-platform online experiments 2016

Wisconsin School of Business
Scalable assessment of cross category promotion effects using Machine Learning 2016
Introduction to R and its role in Marketing research 2016

TEACHING EXPERIENCE

4.7/5.0 with **90+** reviews on **ratemyprofessors.com**

Teaching Assistant 2011–2017
Introduction to Statistical Inference, Mathematical Statistics, Applied Statistics, and Statistical Methods

Instructor 2013
Engineering Statistics, and Introduction to Statistics