

# Elham Sallin-Barzegaran

Data Scientist - Msc in Computer Science

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Echandens, Switzerland



## Professional Experience

Data Scientist II - Expedia Group

Revenue Performance Analytics: Rev+, Market Maker, Revenue Performance API

Aug 2021 – Present

Geneva, Switzerland

- Worked with multiple stakeholders from Commercial, Product, PRPM and Marketing to support Revenue Performance analytics.
- Designed and refined Rev Performance success metrics and reporting in collaboration with E4B finance, Commercial and Product team.
- Constructed Incrementality model for Rev+ and Market Maker using Casual Ransom Forest, basis of Rev Perf main success metric.
- Refresh and reconstructed Rev+ Rule-based segmentation pipeline. Additionally, built a behavioural segmentation model for Rev+ to specify user personas.
- Built and maintained several data pipeline and reporting dashboards for Rev Performance.

Postdoctoral Researcher - University of Fribourg

Project: Functional networks of visual cortex

Jun 2019 – Mar 2021

Fribourg, Switzerland

- New insights on brain functional networks in visual processing from high dimensional physiological data. Published in [Plos Biology](#).
- Developed data pipelines including preprocessing, causality analysis, multivariate time series analysis, linear regression, clustering and factor analysis. The codes available in [Python](#) and [Matlab](#).

Postdoctoral Researcher - Stanford University

Project: Simulation framework for dimensionality reduction methods

Jan 2018 – Jun 2019

Stanford, United states

- Developed a realistic simulation framework for assessment and validation of analysis methods applied to high dimensional data (EEG). The Toolbox and dataset are available on [Open Science Framework](#).
- New insights on cortical sources of visual acuities. Data processing pipeline included signal processing, dimensionality reduction and hypothesis testing. Published in [Nature Scientific Reports](#).

## Education

PhD in Neuroscience - University of Lausanne

Project: Human Brain Rhythms

Dec 2013 – Dec 2017

Lausanne, Switzerland

- Supported by Nano-Tera program, [BodyPoweredSenSE](#) project.

MSc in Computer Science - Sharif University of Technology

Project focus: Analysis of complex networks

Sep 2011 – Sep 2013

Tehran, Iran

- Major in Artificial Intelligence

## Personal Statement

With several years of experience as data scientist at Expedia Group and research in academia, I enjoy diving into complex data to extract patterns and insights that can be translated into practical solutions.

## Skills

- Languages: English, French, Farsi
- Programmin languages: R, Python, Matlab, Pyspark, SQL
- Tableau
- Data Visualization in Python/Excel
- Statistical Analysis
- Knowledge of Machine Learning
- Time-Series Analysis
- Signal Processing
- Object Oriented Programming

## More Information



LinkedIn

<https://www.linkedin.com/in/elham-barzegaran-4a109242/>



Publications

<https://scholar.google.ch/citations?user=mQTnCwCAAAAJhl=en>



Github - Academic Projects

<https://github.com/EBarzegaran/>



IEX - Expedia Analyses

[iex.expedia.biz/page/eg-insights/spx-ax-revenue-performance-analyses](https://iex.expedia.biz/page/eg-insights/spx-ax-revenue-performance-analyses)

## Achievements

- Awarded early postdoc mobility grant - Swiss National Science Foundation for a 1.5-year postdoc at Stanford university, Date: Jan 2018- June 2019.
- Published nine scientific articles in well-known peer-reviewed scientific journals and presented in several international conferences.