



Morteza Shahrezaye 

born 29.08.1988

Education

- 2019–present **Postdoctoral Researcher**, *University of St. Gallen*, St. Gallen, Switzerland.
Supervisor: Prof. Dr. Miriam Meckel
- 2016–2019 **Doctoral Researcher**, *Technical University of Munich*, Munich, Germany.
Supervisor: Prof. Dr. Simon Hegelich
- 2011–2014 **Masters of Economics**, *Siegen University*, Siegen, Germany, *GPA – 1.8*.
- 2007–2011 **Bachelor of Economics**, *Shahid Beheshti University*, Tehran, Iran, *GPA – 13.9*.

Publications

- 2019 **“Measuring the Ease of Communication in Bi-partite Social Endorsement Networks”**.
10th International Conference on Social Media & Society
- 2019 **“Estimating the Political Orientation of Twitter Users in Homophilic Networks”**.
AAAI 2019 Spring Symposia
- 2019 **“Distorting Political Communication: The Effect of Hyperactive Users in Online Social Networks”**.
IEEE INFOCOM
- 2019 **“The rise of the AfD: A Social Media Analysis”**.
10th International Conference on Social Media & Society
- 2018 **“Social Media and Microtargeting: Political Data Processing and the Consequences for Germany”**.
Big Data & Society
- 2018 **“Social Media Report: The 2017 German Federal Elections”**.
TUM University Press
- 2017 **“Social Media und Microtargeting in Deutschland”**.
Informatik Spektrum
- 2017 **“Automated processing of panoramic video content using machine learning techniques”**.
US Patent

Schmellerstr. 13 – Munich, 80337

☎ 017655419472 • ✉ morteza.shahrezaye@gmail.com

1/4

- 2015 **“The communication behavior of German MPs on Twitter: Reaching to the converted and attacking enemies”**.
European Policy Analysis

Teaching

- Machine Learning **Introduction to Machine Learning for Engineers**, *TU Munich*, one semester.
main instructor
- Statistics **Parametric Statistics**, *TU Munich*, two semesters.
main instructor
- Statistics **Statistics for Political Scientists**, *TU Munich*, one semester.
main instructor
- Mathematics **Mathematics for Political Scientists**, *TU Munich*, three semesters.
second instructor

Patents / Grants

- 2019 **Mapping Disinformation Campaigns across Platforms: Access to Privacy-Protected Facebook Data**.
[Social Media and Democracy Research Grants](#)
- March 2019 **Best presentation (among 15)**, AAAI 2019 Spring Symposia, Stanford University.
“Estimating the Political Orientation of Twitter Users in Homophilic Networks”
- July 2017 **Automated processing of panoramic video content using machine learning techniques**, patent number US20170195561A1.
status : patent applied

Work Experiences

- 2019–present **Project Manager - post-doc researcher**, *University of St. Gallen*.
St. Gallen, Switzerland
- 2020–present **Data Scientist**, *Bayerischer Rundfunk*, part-time.
Munich, Germany
- 2016–2019 **PhD candidate**, *Technical University of Munich*.
 - Leading research in different fields of AI including neural networks, natural language processing, machine learning and network analysis
 - Initializing and maintaining more than a billion of complex documents on non-rational NoSQL databases for live data retrieval and querying (more than 40 TB of data)
 - Maintaining my personal website about data journalism with publishing short articles about the use of big data analysis in understanding the wild-data produced on different social media platforms ([BEDATIFY.COM](#))
 - Programing and maintaining the website about the live interactive analysis of political Tweets published on Twitter ([political-dashboard.com](#))
- 2014–2016 **Core software developer, computer vision and Machine Learning**, *DDDUCTR*.
 - Developing computer vision algorithms to analyze panoramic 360 degree videos on the go (live)
 - Developing algorithms to continuously collect data from different social media platforms and to store them in rational databases

- 2012–2015 **Research assistant**, *University of Siegen, Das Forschungskolleg (FoKoS)*.
 ○ Assisting research projects on pricing electricity in energy markets
 ○ Working with two professors on the same time
- 2013–2014 **Scientific programmer**, *Statmath GmbH*.
 ○ Programming Python and Matlab projects on projecting the trajectory of demographics in different regions of Germany

Professional Trainings

- 2019 **Scrum Master**, *Oliver F. Lehmann Project Management Training*, Munich.
 2019 **User-Centered Research**, *Technical University of Munich*, Munich.
 2018 **Führung: Konsequent mit Persönlichkeit**, *Technical University of Munich*.
 2018 **Prototype your PhD**, *UnternehmerTUM*.

IT skills

General Skills

- Deep learning algorithms (different architectures of Neural Networks)
- Machine learning algorithms
- Computer vision algorithms
- NoSQL implementation and maintenance (expert in Elasticsearch)
- Natural Language Processing
- Natural Language Generation
- Cloud computing (Amazon AWS) and distributed computations
- Streaming analytics with Spark
- Statistical modeling
- Dynamic visualizations with JavaScript (D3.js)
- Website programming and design (CSS, HTML, JS, PHP)

Programming

- Platforms
- Python (TensorFlow - Keras)
 - C++
 - Elasticsearch
 - java
 - open-CV
 - Cran R
 - Matlab
 - Mathematica, JavaScript(D3.js)
 - \LaTeX
 - IBM CPLEX
 - Apache Storm and Kafka (intermediate)
 - HTML

Public Appearances

- October 2018 **Observer Research Foundation**, NEW DELHI.
 “War by Other Means: Influence Operations in Cyberspace”

Schmellerstr. 13 – Munich, 80337

☎ 017655419472 • ✉ morteza.shahrezaye@gmail.com

March 2018 **Singapore Parliament**, SINGAPORE.
"Consulting Singapore's Parliament on Online Falsehoods"

Peer Reviewed Publications

- August 2017 **Social Media und Microtargeting in Deutschland.**
Papakyriakopoulos O, Shahrezaye M, Thieltges A, Serrano JC, Hegelich S. Informatik-Spektrum. 2017 Aug 1;40(4):327-35.
- September 2015 **The communication behavior of German MPs on Twitter: preaching to the converted and attacking opponents.**
Hegelich S, Shahrezaye M. European Policy Analysis. 2015 Sep 1;1(2):155-74.

Languages

Persian **Mothertongue**
English **Fluent**
German **Fluent**

Interests

- Photography
- Musics
- Dancing
- Cooking