

# Adrin Jalali

## Curriculum Vitae

Greifenhagener Str. 9  
10437, Berlin, Germany  
☎ +49-151-68121562  
✉ [adrin.jalali@gmail.com](mailto:adrin.jalali@gmail.com)  
📁 [github/adrinjalali](https://github.com/adrinjalali)

### Experience

- 2016-Present **Ancud IT**, *Data Science Department*, Berlin, Germany.
- Teach **Elasticsearch**
- 2016 **MisterSpex GmbH**, *Business Intelligence Department*, Berlin, Germany.
- Dynamic ordering of products on landing pages based on several KPIs - **R, TSQL**
  - TV-ad attribution model using Gaussian Processes - **Python**
- 2012-Present **Max Planck Institute for Informatics**, *Computational Biology and Applied Algorithmics Department*, Saarbrücken, Germany.
- Interpretable Sparse methods for cancer associations using an ensemble of sparse support vector machines (SVMs) - **Python**
- 2011-2012 **British Columbia Cancer Research Center**, *Terry Fox Laboratory*, Vancouver, Canada.
- Automated flow cytometry data analysis and visualization using dynamic programming, clustering, graph algorithms, and SVMs - **C++, R**
- 2009–2011 **Tosan Intelligent Data Miners**, *R&D Department*, Tehran, Iran.
- Fraud detection in banks, *Project Manager* - **C++, Java, Oracle, Microsoft BI**
    - Behavioral clustering of bank employees in time to detect major behavioral changes as anomalies.
    - Behavioral clustering of customers according to their debit card transactions in time to detect changes as potential fraud.
  - Operational intelligence, *Project Manager* - **C++, Oracle, MATLAB, Java**
    - Predict the terminal type of the next transaction of the customers using their transaction history.
    - Soft cluster customers according to their fuzzified transaction times and detect abnormal changes in cluster membership values.
    - Build a graph model to predict geographical location of terminals using customers' transaction history.
- 2008 **Orado Group**, Tehran, Iran.
- Programmer in an educational/social network targeting Iranian secondary and high school students - **C#, T-SQL**
- 2006–2007 **Fidofa Software Group**, Tehran, Iran.
- Automatic trading system in futures stock market, *Programmer* - **Matlab, C#**
    - Implementation of Markowitz modern portfolio theory.
    - Implementation of GARCH indicator for stock market price.
    - Optimize parameters of company's existing trading systems using a genetic algorithm.

- 2006 **Sourena Software Group**, Tehran, Iran.  
Programmer in a Persian text to speech project - **C#**
- 2005 **Tarrah Sarv System**, Tehran, Iran.  
Programmer in a system handling all personnel and factory processes of a chicken farm - **Delphi, T-SQL**

#### Other Experience

- 2009 **University of Tehran, Mining Department**, Tehran, Iran.  
Predicting Compressional and Shear Wave Velocities in dam sites in south west of Iran having sparse samples taken from the site before construction of dams using an adaptive Neuro-Fuzzy Inference System model - **Matlab**
- 2006 **University of Tehran, Management Faculty**, Tehran, Iran.  
Semi-dynamic recommendation system for semi-dynamic retail store/ad-based web-sites using singular value decomposition and a genetic algorithm - **C++**
- 2005 **Tehran Polytechnic, Computer Engineering Department**, Tehran, Iran.  
Power efficient semi-random message passing and routing algorithm for ad-hoc mobile sensor networks - **C++**
- 2002–2005 **Tehran Polytechnic, Rescue Simulation League, Robotics Lab**, Tehran, Iran.  
7th place, world cup 2002 Italy  
5th place, world cup 2005 Japan  
Fire brigades and police forces - **C++**  
- Clustering of the buildings of the simulated world using self organizing map.  
- Program a strategy accordingly to find the best order of the buildings to be extinguished by fire brigades.

#### Teaching Positions

- 2011 **Lecturer**, *Introduction to Programming*, Department of Fundamental Sciences, University of Tehran, Tehran, Iran.
- 2006 **Teaching Assistant**, *Introduction to Graphics Programming in C*, Department of Mechanical, Civil, and Texture Engineering, Tehran Polytechnic, Tehran, Iran.
- 2006 **Teaching Assistant**, *Data Structures and Algorithms*, Department of Math and Computer Science, Tehran Polytechnic, Tehran, Iran.
- 2005 **Teaching Assistant**, *Compilers*, Department of Math and Computer Science, Tehran Polytechnic, Tehran, Iran.
- 2004 **Teaching Assistant**, *Micro Processors*, Department of Math and Computer Science, Tehran Polytechnic, Tehran, Iran.

#### Education

- 2012–Present **PhD (cont.) in Computer Science/Bioinformatics**, *Max Planck Institute for Informatics, Computational Biology and Applied Algorithmics Department*, Saarbrücken, Germany,  
*Supervisors*: Dr. Nico Pfeifer, Prof. Dr. Dr. Thomas Lengauer,  
*Dissertation Topic*: Machine Learning in Cancer Diagnosis,  
*Degree anticipated*: July 2016.

- 2011–2012 **PhD in Bioinformatics**, *University of British Columbia, British Columbia Cancer Research Center, Terry Fox Laboratory*, Vancouver, Canada,  
*Supervisor*: Dr. Ryan Brinkman,  
*Topic*: Automated analysis of flow-cytometry data.
- 2006–2009 **MSc in Computer Science**, *University of Tehran, School of Mathematics, Statistics, and Computer Science*, Tehran, Iran,  
*Supervisor*: Dr. Abbas Nowzari-Dalini,  
*Thesis Topic*: Finding DNA Motifs Using Bidirectional Recurrent Neural Networks,  
*GPA*: 18.42/20.
- 2002–2006 **BSc in Computer Science**, *Tehran Polytechnic, Department of Mathematics, and Computer Science*, Tehran, Iran,  
*Thesis Topic*: Design and Implementation of a Genetic Algorithm to Solve Time Table of a School,  
*GPA*: 15.98/20.

---

## Service

- 2015 **Chemistry, Physics, and Technology Section Representative**, *PhDnet steering group*, Max Planck Society, Germany.
- 2012 **Bioinformatics Representative**, *College for Interdisciplinary Studies Graduate Student Society*, University of British Columbia, Vancouver, Canada.
- 2012 **“Bioinformatics” and “British Columbia Cancer Agency Graduate Student and Post Doctoral Fellow Society” representative**, *Graduate Student Society*, University of British Columbia, Vancouver, Canada.

---

## Computer Skills

**C, C++, Python, Linux**

C#, Java, R, Matlab, T-SQL, PL/SQL

Oracle, MySql, MS-SQLServer, SSAS

---

## Languages

Persian **Native**

English **Fluent**

German **Intermediate (~B1)**

---

## Publications

1. Handl L, Jalali A, Scherer M, Pfeifer N., *Partially blind domain adaptation for age prediction from DNA methylation data*, arXiv preprint arXiv:1612.06650, 2016.
2. Jalali A., and Pfeifer N., *Interpretable per Case Weighted Ensemble Method for Cancer Associations*, BMC Genomics, volume 17, no. 1, 2016.
3. Courtot M., Meskas J., Diehl A. D., Droumeva R., Gottardo R., Jalali A., Taghiyar M.J., *flowCL: ontology-based cell population labelling in flow cytometry*, Bioinformatics 31, no. 8 (2015): 1337-1339.
4. Jalali A., and Pfeifer N., *Interpretable per Case Weighted Ensemble Method for Cancer Associations*

- tions, Algorithms in Bioinformatics, pp. 352-353. Springer Berlin Heidelberg, 2014.
5. O'Neill K.\*, Jalali A.\*, Aghaeepour N.\*, Hoos H.H., and Brinkman R.R., *Enhanced flow-Type/RchyOptimyx: A Bioconductor pipeline for discovery in high-dimensional cytometry data*, Bioinformatics (2014), doi: 10.1093/bioinformatics/btt770.
  6. Jalali A.\*, Aghaeepour N.\*, O'Neill K., Chattopadhyay P.K., Roederer M., Hoos H.H., Brinkman R.R., *RchyOptimyx: cellular hierarchy optimization for flow cytometry*, Cytometry Part A 81, no. 12 (2012): 1022-1030.
  7. Aghaeepour N., Chattopadhyay P.K., Ganesan A., O'Neill K., Zare H., Jalali A., Hoos H.H., Roederer M., and Brinkman R.R., *Early Immunologic Correlates of HIV Protection can be Identified from Computational Analysis of Complex Multivariate T-cell Flow Cytometry Assays*, Bioinformatics, 2012: 28(7):1009–1016.
  8. Rezaei F.\*, Jalali A.\*, Memarian H., *Estimation of Compressional and Shear Wave Velocities using Adaptive Neuro-Fuzzy Inference System, in some of dam sites in south west of Iran*, Journal of the Earth, Tehran, Iran, 2009.
  9. Behsaz B., Jalali A., Janzadeh H., Jouyandeh M.R., Molazem F., Rahimi A., Salehi A., and Tavakoli Ghinani M., *Team Description of S.O.S. 2005*, Proceedings CD RoboCup 2005, Osaka, Japan, 2005.
  10. Tashakori M., Jalali A., Jooyandeh M.R., Gholami A., Behzadian A., Ghasemloo K., Esfahbod B., *Rayan Team Strategy Description*, Proceedings CD RoboCup 2004, Lisboa, Portugal, 2004.
  11. Shiri M.E., Jalali A., Jooyandeh M.R., Roshandel Tavana R., Behzadi M., *AUTRescue Team Strategy Description*, Proceedings CD RoboCup 2003, Springer-Verlag, Padova, Italy, 2003.

\* co-authors contributed equally