

# Adrin Jalali

## Curriculum Vitae

Berlin, Germany  
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### Experience

- 2018-present **scikit-learn**, *Core Developer*.
- 2016-present **Ancud IT**, *Data Science Department*, Berlin, Germany.
- Machine Learning (scikit-learn, tensorflow, GPy, etc.)
  - NLU/NLP (intent and entity recognition, conversation context, etc.)
  - NoSQL (Cassandra, Elasticsearch, Solr)
  - Machine Learning DevOps (PipelineIO: kubernetes, weave-scope, AWS, MS-Azure, docker, etc.)
- 2016 **MisterSpex GmbH**, *Business Intelligence Department*, Berlin, Germany.
- TV-ad attribution model using Gaussian Processes - **Python**
  - Dynamic ordering of products on landing pages based on several KPIs - **R, TSQL**
  - Improving Google AdWords ad placement and bidding strategies - **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**

## 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

- 2017-present **PyData Berlin coorganizer**, NumFocus, Berlin, Germany.
- 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.

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## Languages

Persian **Native**  
English **Fluent**  
German **Intermediate (~B2)**

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## 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*, 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):10091016.
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