# Adham Beykikhoshk

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## Education

2013 – present  $\mathbf{PhD}$  in Computer Science, Deakin University, Australia

Thesis: Knowledge Discovery and Probabilistic modelling of Onlnie Autism Spectrum Disorder Data

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Supervisors: Dr Dinh Phung, Dr Svetha Venkatesh, and Dr Ognjen Arandelović

2011 - 2012 **MSc** with distinction in Artificial Intelligence, University of Southampton, United Kingdom

Thesis: Viewpoint Invariant Gait Energy Detection Image using Microsoft Kinect Supervisors: Dr. Mahesan Niranjan, Dr. Mark S. Nixon, and Dr John N. Carter

2002 – 2007 **BSc** in Electrical Engineering, KNToosi University of Technology, Iran Thesis: THESIS Supervisors: Dr. Ali Khaki Sedigh, Dr Houman Sadjadian

## Research Interests

Statistical Machine Learning, Bayesian Statistics, Data Mining

## **Publications**

- Beykikhoshk, A., Phung, D., Arandelović, O., and Venkatesh, S. (2016). Analysing the History of Autism Spectrum Disorder using Topic Models. To appear in the proceedings of *IEEE International Conference on Data Science* and Advanced Analytics (DSAA). IEEE.
- 2. Beykikhoshk, A., Phung, D., Arandelović, O., and Venkatesh, S. (2016). Discovering Topic Structure of a Temporally Evolving Document Corpus. To appear in Knowledge and Information Systems Journal. December 2015, arXiv preprint arXiv:1512.08008
- Beykikhoshk, A., Arandelović, O., Phung, D., and Venkatesh, S. (2015). Overcoming Data Scarcity of Twitter: Using Tweets as Bootstrap with Application to Autism-Related Topic Content Analysis. In the proceedings of IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), pp. 1354-1361, IEEE. doi:10.1145/2808797.2808908.
- Beykikhoshk, A., Arandelović, O., Phung, D., Venkatesh, S., and Caelli, T. (2015). Using Twitter to Learn About the Autism Community. In Social Network Analysis and Mining, 5(1), pp. 5-22. doi:10.1145/2808797.2808908
- Beykikhoshk, A., Arandelović, O., Phung, D., and Venkatesh, S. (2015). Hierarchical Dirichlet Process for Tracking Complex Topical Structure Evolution and its Application to Autism Research Literature In the proceedings of *Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, pp. 550-562. Springer International Publishing. doi:10.1007/978-3-319-18038-0\_43
- Beykikhoshk, A., Arandelović, O., Phung, D., Venkatesh, S., and Caelli, T. (2014). Data-mining Twitter and the Autism Spectrum Disorder: A Pilot Study In the proceedings of IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), pp. 349-356. IEEE. doi:10.1109/ASONAM.2014.6921609

Adham Beykikhoshk 2

## **Publications**

Ghofrani, Z., Mokhtarzade, M., Sahebi M.R., and Beykikhoshk, A. (2014) Evaluating Coverage Changes in National Parks using a Hybrid Change Detection Algorithm and Remote Sensing. In *Journal of Applied Remote Sensing*, 8(1), pp. 083646-083646. doi:10.1117/1.JRS.8.083646.

Teaching

An Introduction to Data Science, SIT112, Winter 2015, Deakin University (It was the first time the course was being offered in Deakin University. The material I prepared, is still being used.)

An Introduction to Git, Winter 2016, Deakin Universoty, PRaDA

**Employment** 

Mar 2009 - Sep 2011, Fakoor Meghnatis Spadana, IT Manager No. 14, 20th Street, Qaem Maqam Street, Tehran, Iran

Feb 2010 - Sep 2011, Parsa International, IT Consultant No. 5, Shabtab Street, North Qeytariyeh, Tehran, Iran

Sep 2010 - Sep 2011, Sadad Machine, IT Consultant

No. 12, North Razan Street, Mirdamad 13 Boulevard, Tehran, Iran

Jan 2007 - Nov 2008, Karino, IT Manager

No. 1488, Madani Street, Resalat Square, Tehran, Iran

Computer Skills Programming: C, C++, Python, Julia, Matlab, R

Visualization: D3.js, JavaScript

Distributed computing: Apache Spark, Hadoop

Document preparation: LATEX, LyX

Software Packages BIAS.il, https://github.com/adham/BIAS.il

Bayesian Inference At Scale. It is a package written in Julia for Bayesian inference

and modelling with large scale data.

BNP.jl, https://github.com/adham/BNP.jl

Bayesian Non-Parametrics. It is a package written in Julia for non-parametric

Bayesian modelling.

Awards and Scholarships Full scholarship for PhD at Deakin University (Tuition fees + stippend)

NICTA

Tuition fees scholarship for MSc at University of Southampton

Aga Khan Foundation

References

Upon request