



Talayeh Aledavood

Curriculum Vitae

Education

- 2017 **EIT Digital Doctoral Program (dual degree), ICT Innovation**, *European Institute of Innovation and Technology Digital Labs*, Espoo, Finland.
- 2017 **D.Sc. Computational Science (with distinction)**, *Aalto University*, Espoo, Finland, Thesis: Temporal Patterns of Human Behavior.
Advisor: Prof. Jari Saramäki.
- 2009 **M.Sc. Engineering Physics**, *Technische Universität München*, Munich, Germany, Thesis: Studies of Color Transparency Using Di-jet Events from a 190 GeV/c Pion Beam Scattered on Various Targets at COMPASS..
Advisor: Prof. Bernhard Ketzer.
- 2006 **B.Sc. Physics**, *Sharif University of Technology*, Tehran, Iran.
- 2001 **High School Diploma**, *National Organization for Development of Exceptional Talents*, Tehran, Iran.

Employment

- 1/20– **James S. McDonnell Postdoctoral Fellow**, *School of Interactive Computing, Georgia Institute of Technology*, Atlanta, GA, USA .
- 6/18–10/19 **James S. McDonnell Postdoctoral Fellow**, *Clinicum, University of Helsinki*, Helsinki, Finland.
- 1/18–5/18 **Postdoctoral Researcher**, *Department of Computer Science, Aalto University*, Espoo, Finland.
- 11/12–12/17 **Doctoral Researcher**, *Department of Computer Science, Aalto University*, Espoo, Finland.
- 12/10–11/12 **Research Engineer**, *Orange Labs, France Télécom*, Issy-les-Moulineaux, France.
- 3/10–7/10 **Research assistant**, *Centre d'analyse et de mathématique sociales, École des Hautes Études en Sciences Sociales*, Paris, France.
- 10/09–2/10 **Research assistant**, *Chair of Prof. Stephan Paul (E18), Physics department, Technische Universität München*, Garching, Germany.
- 9/07–3/08 **Research assistant**, *Max Planck Institute für Physik*, Munich, Germany.

- 11/06–9/07 **Research assistant**, *Silicon and GEM detectors group of the COMPASS experiment at CERN*, Technische Universität München and CERN, Garching, Germany and Geneva, Switzerland.
- 6/18– **Visiting Researcher**, *Department of Computer Science, Aalto University*, Espoo, Finland.
- 11/16–4/17 **Research Intern**, *Predictive Health Analytics Team, Nokia Digital Health Lab*, Espoo, Finland, This internship was part of the EIT Digital Doctoral Program and focused on productization of research ideas..
- 09/16–10/16 **Visiting Researcher**, *Oxford Internet Institute, University of Oxford*, Oxford, UK, Host: Dr. Taha Yasseri.
- 1/16–3/16 **Visiting Researcher**, *Department of Biostatistics, Harvard T.H. Chan School of Public Health*, Boston, MA, United States, Host: Prof. Jukka-Pekka Onnela.
- 8/15–10/15 **Visiting Researcher**, *Institute of Mathematics and Computer Science, Technical University of Denmark*, Lyngby, Denmark, Host: Prof. Sune Lehmann.
- Summer 2011 **Visiting Researcher**, *Austrian Institute of Technology*, Supervisor: Prof. Marta C. González (MIT), Vienna, Austria.

Grants, Fundings, and Awards

- 2020 Academy of Finland personal funding for the project “Novel Computational Methods in Mobile Monitoring of Mood: from Raw Data to Clinical Insights”– currently under review
- 2019 Aalto School of Science Team-building and Co-operation Award in recognition of work related to diversity and mentoring.
- 2019 Helsinki Institute for Information Technology funding to recruit a M.Sc. thesis worker (together with Prof. Aris Gionis)– EUR 20K
- 2019 Funding by Aalto University Digi, Health, and Experience Platforms for organizing the first Symposium on Health and Behavior Data at Aalto University (together with Dr. Richard Darst)– EUR 7K
- 2018 James S. McDonnell Postdoctoral Fellowship in “Understanding Dynamic & Multi-scale Systems”– USD 200K
- 2017 The Helsinki Doctoral Education Network in Information and Communications Technology travel grant
- 2017 FinCEAL+ travel grant
- 2016 The Helsinki Doctoral Education Network in Information and Communications Technology travel grant
- 2013–2017 EIT Digital Doctoral School grant– Support for 6 months of research visits abroad, attendance in multiple courses and workshops across Europe, and 6 months of business development internship

Pedagogical Training

- 1/20– **Tech to Teaching Pedagogical Training Program**, *Georgia Institute of Technology*.
- Completed **Introduction to University Pedagogy**, *Aalto University*.
6/19
- Completed **Learning and Teaching in Higher Education**, *Aalto University*.
6/19

Teaching Experience

- 2018–2019 **Digital Health and Human Behavior (course design and instruction)**, *Aalto University, Department of Computer Science.*
- 2018–2019 **Digitalization Challenge (data science coach)**, *Aalto University, School of Business.*
- 2017–2018 **Life Science Technology Project Course (project design and supervision)**, *Aalto University, Department of Computer Science.*
- 2015–2016 **Life Science Technology Project Course (project design and supervision)**, *Aalto University, Department of Computer Science.*
- 2015–2016 **Complex Networks (teaching assistant)**, *Aalto University, Department of Computer Science.*
- 2014–2015 **Complex Networks course (teaching assistant)**, *Aalto University, Department of Computer Science.*

Advising and Mentoring

- 3/16– **Ana Triana Hoyos**, *currently doctoral candidate at Aalto University Department of Computer Science*, mentoring and advising in various projects.
- 3/16– **Tuomas Alakörkkö**, *currently doctoral candidate at Aalto University Department of Computer Science*, mentoring and advising in various projects.
- 6/19– **Anna Hakala**, *currently MSc student at Aalto University Department of Computer Science*, M.Sc. thesis advisor.
- 9/18–12/18 **Marharyta Dekret**, *former M.Sc. student at Aalto University Department of Computer Science*, M.Sc. Project in Machine Learning advisor.
- 9/18–12/18 **Simo Antikainen**, *B.Sc. thesis advisor.*
- 9/18–12/18 **Veera Hakonen**, *B.Sc. thesis advisor.*
- 9/18–12/18 **Joakim Engström**, *B.Sc. thesis advisor.*
- 4/16–/6/18 **Annasofia Martikkala**, *Medical student at the University of Helsinki*, advising and mentoring in MoMoMood project.

Organization and Service

- **Local Chair, The International AAAI Conference on Web and Social Media (ICWSM-2020)**, Atlanta, GA, USA, June 2020.
- **Associate Chair for the Late Breaking Works track at The ACM Conference on Human Factors in Computing Systems (CHI 2020).**
- **Co-founder and co-organizer of “Mentoring Puzzle Garage”**, an initiative at Aalto University CS to mentor junior researchers especially female scientists (Jan-Dec 2019).
- **Chair and Co-organizer of “Health and Behavior Data Symposium”** at Aalto University (www.aalto.fi/hbd19), April 2019. This symposium was a personal initiative (together with Dr. Richard Darst) and was fully planned, organized and hosted by the two co-organizers. This event attracted over 150 participants from around 50 institutions nationally and internationally.
- **Reviewer:**
 - Transactions on the Web
 - iScience
 - JMIR
 - JMIR mHealth and uHealth
 - Physica A

- CHI 2020
- Designing Interactive Systems (DIS) Conference 2019
- **Program Committee Member:**
 - ML for Mental Health ACII 2019 Workshop
 - Annual International Conference on Computational Social Science (IC2S2) 2018
 - The International AAI Conference on Web and Social Media (ICWSM) 2018
 - Annual International Conference on Computational Social Science (IC2S2) 2016
 - The International AAI Conference on Web and Social Media (ICWSM) 2016

Publications

h-index: 6, ORCID iD: 0000-0002-0110-5694

- **Aledavood T**, Lehmann S, and Saramäki J, "Digital daily cycles of individuals." *Front. Phys.* (2015) 3:73.
- **Aledavood T**, López E, Roberts S, Reed-Tsochas F, Moro E, Dunbar R, and Saramäki J, "Daily rhythms in mobile telephone communication." *PLoS One* 10.9 (2015): e0138098.
- Kujala R, **Aledavood T**, and Saramäki J. "Estimation and monitoring of city-to-city travel times using call detail records." *EPJ Data Science* 5.1 (2016): 1.
- **Aledavood T**, López E, Roberts S, Reed-Tsochas F, Moro E, Dunbar R, and Saramäki J, "Channel-specific daily patterns in mobile phone communication." *Proceedings of ECCS 2014: European Conf. on Complex Systems*. Springer, 2016.
- **Aledavood T**, Triana Hoyos A, Alakörkkö T, Kaski K, Saramäki J, Isometsä E, and Darst R, "Niima: a multi-sensor data collection framework for mental health studies" *JMIR Research Protocols* 6.6 (2017): e110.
- **Aledavood T**, Lehmann S, and Saramäki J, "Social network differences of chronotypes identified from mobile phone data." *EPJ Data Science* 7.1 (2018): 46.
- **Aledavood T**, Torous J, Triana Hoyos A, Naslund J, Onnela J-P, and Keshavan M, "Smartphone sensing of sleep in depression, anxiety, and psychotic disorder patients." *Curr Psychiatry Rep.* 21.7 (2019): 49.
- Jorgensen T, **Aledavood T**, Saramäki J, and Roberts S. "Distance matters: Proximity in face-to-face interaction is associated with mobile phone communication." (under review)
- **Aledavood T**, Kivimäki I, Lehmann S, and Saramäki J, "Rhythm sensing: identifying chronotypes and sleep and activity rhythms from passive mobile phone data." (manuscript in preparation)
- Triana Hoyos A, Heikkilä R, Darst R, Baryshnikov I, Holmen J, Ekelund J, Saleva O, Rihimäki K, Isometsä E, and **Aledavood T** "Predicting future mood in psychiatric patients with mood disorders." (work in progress)
- Alakörkkö, Triana Hoyos A, Heikkilä R, Darst R, Baryshnikov I, Holmen J, Ekelund J, Saleva O, Rihimäki K, Isometsä E, and **Aledavood T** "Sleep and activity patterns in mood disorder patients and healthy controls." (work in progress)

Invited Talks and Presentations

- 10/19 Poster presentation at Conference on Complex Systems 2019, Singapore
- 9/19 Invited talk at Brain and Mind Breakfast Seminar Series, Aalto University, Espoo, Finland
- 8/19 Invited talk at SocWeb Lab, Georgia Institute of Technology, Atlanta, GA, USA
- 5/19 Invited talk at The Branded Self Event (science talk for the general public), Espoo, Finland
- 5/19 Poster presentation at Computing and Mental Health (Symposium at CHI2019), Glasgow, UK
- 3/19 Invited talk at Women in Data Science (WiDS) Conference 2019, Helsinki chapter, Helsinki, Finland
- 3/19 Invited talk at Turku University Department of Psychiatry, Turku, Finland
- 3/18 Presentation at JSMF and Santa Fe Institute Postdocs Conference, Santa Fe, NM, USA
- 3/18 Invited talk at Onnela Lab, Harvard T.H. Chan School of Public Health, Boston, MA, USA
- 3/18 Presentation at CompleNet Conference 2018, Boston, MA, USA
- 1/18 Presentation at EIT ICT LAB Helsinki Node, Espoo, Finland
- 9/17 Presentation at the Conference on Complex Systems 2017, Cancun, Mexico
- 12/16 Invited talk at Nokia Digital Health Lab, Espoo, Finland
- 11/16 Invited talk at the Knowledge Diffusion Network Webinar (Network of Iranian Academics Abroad)
- 10/16 Invited talk at Oxford Internet Institute Brown Bag Seminar, University of Oxford, Oxford, UK
- 9/16 Presentation at the Conference on Complex Systems 2016, Amsterdam, Netherlands
- 1/16 Invited talk at Onnela Lab, Harvard T.H. Chan School of Public Health, Boston, MA, USA
- 1/16 Presentation at NetSciX Conference, Wrocław, Poland
- 11/15 Invited talk at Friday Lunch Talks, EIT Digital Lab Helsinki Node, Espoo, Finland
- 6/15 Presentation at the International Conference on Computational Social Science, Helsinki, Finland
- 4/15 Presentation at NetMob 2015 Conference, Cambridge, MA, USA
- 4/15 Poster presentation at NetMob 2015 Conference, Cambridge, MA, USA
- 3/15 Invited talk at Lehmann group at the University of Copenhagen, Copenhagen, Denmark
- 2/15 Invited talk at EIT ICT Labs, Espoo, Finland
- 9/14 Presentation at the European Conference on Complex Systems 2014, Lucca, Italy

Selected Press Coverage

- 1/7/19 Healio Psychiatry, Monitoring sleep via smartphones shows potential for psychiatric disorders
- 11/12/17 Economic Times, Night owls have larger social networks than early birds
- 8/12/17 Helsingin Sanomat (in Finnish), Puhelimenkäyttö sen paljasti: Yökukkujilla on laajemmat sosiaaliset verkostot kuin aamuvirkuilla
- 7/12/17 Science Daily, Night owls have larger social networks than early birds
- 7/12/17 Ilta Sanomat (in Finnish), Älypuhelin tiedot paljastivat: Yökukkujen sosiaaliset verkostot ovat laajempia kuin aamuvirkkujen

- 28/9/17 MIT Technology Review, First Evidence That Night Owls Have Bigger Social Networks than Early Risers
- 18/10/15 videnskab.dk (in Danish), Din digitale hverdag ligner ingen andres
- 12/10/15 Helsingin Sanomat (in Finnish) Tutkimus: Ihmisen digitaalinen päivärytmi on yhtä yksilöllinen kuin allekirjoitus
- 10/10/15 TIEDE (in Finnish), Ihmisen digitaalinen päivärytmi on yhtä yksilöllinen kuin allekirjoitus
- 7/10/15 PHYS.ORG, Everyone has their own daily rhythm of digital activity, shows study
- 12/3/15 MIT Technology Review (in Spanish), Las mujeres prefieren la noche para llamar a sus parejas
- 5/3/15 MIT Technology Review, Mobile Phone Data Reveals Humanity's Reproductive Strategies