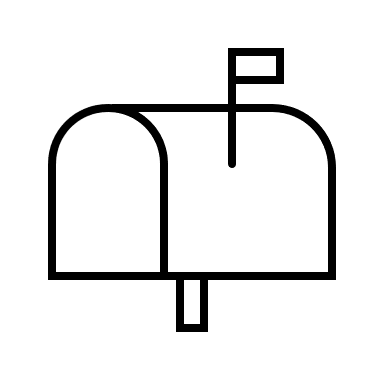
*A person taking a selfie

Description automatically generatedCurriculum Vitae*

University of Technology Sydney, Australia

15 Broadway ULTIMO NSW 2007

Dr. **Alireza Ahadi**  Alireza.ahadi@uts.edu.au

**Interests**

Data science, skills analytics, applied machine learning, large-scale data mining, information retrieval, educational data mining, learning analytics, teacher training, professional development, technology enhanced pedagogy, biomedical data mining, bioinformatics, and computational biology.

**Education background**

* **(2013 - 2018) Research student** in School of software at University of Technology Sydney (UTS):
  + **July 2013 – July 2015**: Project title “A Bioinformatics method for human microRNA target prediction”. Supervisor: Prof Gyorgy Hutvagner
  + **July 2015 – Dec 2018, PhD**, Thesis title: “Data analytics and the novice programmers”. Supervisor: Prof. Raymond Lister.
* **(2010 Jul– 2013 Feb) Master Degree** in Information Technology, University of Technology Sydney (UTS), Australia.
* **(2005 Jun – 2008 Jun) Bachelor Degree** in Computer Science, Shahid Shamsipour Vocational and Educational College, Tehran, Iran.

**Work history**

* **Postdoctoral Research Fellow** at University of Technology Sydney (2021-Present)
* **Postdoctoral Research Fellow** at Macquarie University (2019-2021)
* **Lecturer and Tutor** at University of Technology Sydney (2010-2019)
* **Senior Software Engineer** at Zamin Kavan, Geotechnical Consulting Engineers (2005-2010)

**Research experience**

* **Research assistant** at Queensland University of Technology. (2011-2013)
* **Research assistant** at University of Technology, Sydney. (2011-2018)
* **Research assistant** at RMIT University, Melbourne. (2013-2014)
* **Senior Program Committee Member** for the International Conference on Artificial Intelligence in Education (**AIED**), Innovation and Technology in Computer Science Education (**ITiCSE**), Australian Computing Education Conference (**ACE**), and ACM Transactions on Computing Education (**TOCE**), DataEd conference

**Awards**

* Australian Computing Education Conference, **2012** Best Paper Award.
* Australian Computing Education Conference, **2013** Best Student Paper Award.
* International Research Scholarship at University of Technology, **2015** Sydney.
* Australian Computing Education Conference, **2017** Best Student Paper Award.
* Special Interest Group on Computer Science Education Conference, **2017** Exemplary Paper
* Award for University’s Faculty (**2017** UTS FEIT) High Quality Publication

**Technical skills**

Data analytics, Skills analytics, Data Mining, visualization, classification and clustering, databases, Natural Language Processing, Text Mining, Text Analytics, Learning Analytics, Bioinformatics, Workshop design, Software Development

**Programming experience:** C, C++, Objective C, Python, Java, SQL, Perl, Bash scripting.

**Software Toolboxes:** Eclipse, Ggoby, WEKA, SPSS, KNIME, SPIDER, LaTeX, MATLAB, R project, BioPython, Nvivo, RapidMiner, DBMS.

**Peer Reviewed Publications**

1. **Ahadi, A.**, Singh, A., Bower, M., Garrett, M., 2022, Text mining in education—A bibliometrics-based systematic review, Educ. Sci., 12(3), 210; https://doi.org/10.3390/educsci12030210
2. **Ahadi, A.**, Bower, M., Lai, J., Singh, A., Garrett, M., 2022, Evaluation of teacher professional learning workshops on the use of technology - a systematic review, Professional Development in Education.
3. **Ahadi, A.**, Matheison, L. 2022, A Bibliometrics Analysis of Australasian Computing Education Conference Proceedings, In Proceedings of the Twenty-Fourth Australasian Computing Education Conference (pp. 11-16). ACM.
4. **Ahadi, A.**, Bower, Singh, A., Garrett, M., 2021, Online Professional Learning in Response to COVID-19—Towards Robust Evaluation, Future Internet 13 (3), 56.
5. Bednarik, R., Busjahn, T., Gibaldi, A., **Ahadi, A.**, Bielikova, M., Crosby, M., Essig, K., Fagerholm, F., Jbara, A., Lister, R. and Orlov, P., 2020. EMIP: The eye movements in programming dataset. Science of Computer Programming, 198, p.102520.
6. Ajuyah, P., Hill, M., **Ahadi, A.**, Lu, J., Hutvagner, G. and Tran, N., 2019. MicroRNA (miRNA)-to-miRNA regulation of programmed cell death 4 (PDCD4). Molecular and cellular biology, 39(18).
7. **Ahadi, A.**, Lister, R. and Mathieson, L., 2019, January. ArAl: An Online Tool for Source Code Snapshot Metadata Analysis. In Proceedings of the Twenty-First Australasian Computing Education Conference (pp. 118-125).
8. **Ahadi, A.** and Mathieson, L., 2019, January. A comparison of three popular source code similarity tools for detecting student plagiarism. In Proceedings of the Twenty-First Australasian Computing Education Conference (pp. 112-117).
9. **Ahadi, A.**, Lister, R. and Mathieson, L., 2018, July. Syntax error based quantification of the learning progress of the novice programmer. In Proceedings of the 23rd Annual ACM Conference on Innovation and Technology in Computer Science Education (pp. 10-14).
10. **Ahadi, A.**, Lister, R., Lal, S. and Hellas, A., 2018, January. Learning programming, syntax errors and institution-specific factors. In Proceedings of the 20th Australasian computing education conference (pp. 90-96).
11. **Ahadi A.**, Lister R, Hellas A. A Contingency Table Derived Methodology for Analyzing Course Data. ACM Transactions on Computing Education. 2017 Mar 1.
12. **Ahadi A.,** Lister, R., Lal, S., Leinonen, J. and Hellas, A., 2017, January. Performance and Consistency in Learning to Program. In Proceedings of the Nineteenth Australasian Computing Education Conference (pp. 11-16). ACM.

**Won the award for best student paper**

1. Karo Castro-Wunsch, **Alireza Ahadi** and Andrew Petersen. **2017 “**Evaluating Neural Networks as a Method for Identifying Students in Need of Assistance”. In *Proceedings of the 48th ACM Technical Symposium on Computing Science Education*, ACM.

**Selected as the exemplary paper at SIGCSE**

1. Diana Hatoum, Daniel Yagoub, **Alireza Ahadi**, Najah T. Nassif, Eileen McGowan. **2017** “Annexin/S100A Protein Family Regulation through p14ARF-p53 Activation: A Role in Cell Survival and Predicting Treatment Outcomes in Breast Cancer” PLoS One, http://dx.doi.org/10.1371/journal.pone.0169925.
2. **Alireza Ahadi**, Garuav Salbok, Gyorgy Hutvagner. **2016** “miRTar2GO: a novel rule-based model learning method for cell line specific microRNA target prediction that integrates Ago2 CLIP-Seq and validated microRNA–target interaction data” Nucleic Acids Research, 2016 doi: 10.1093/nar/gkw1185. (**Won the high quality publication award at University of Technology, Sydney**)
3. **Alireza Ahadi**, Arto Hellas, Petri Ihantola, Ari Korhonen and Andrew Petersen. **2016** “Replication in Computing Education Research: Researcher Attitudes and Experiences”. *16th Koli Calling Conference on Computing Education Research*, Koli, Finland.
4. **Alireza Ahadi**. **2016** “Early Identification of Novice Programmer's Challenges in Coding Using Machine Learning Techniques”. *Doctoral Symposium at International Computing Education Research (ICER)*, Melbourne, Australia.
5. **Alireza Ahadi**, Samantha Khoury, Maria Losseva and Nham Tran. **2016** “A comparative analysis of lncRNAs in prostate cancer exosomes and their parental cell lines”. *Genomics Data doi:10.1016/j.gdata.2016.05.010*
6. Juho Leinonen, Krista Longi, Arto Klami, **Alireza Ahadi**, Arto Vihavainen. **2016** “Typing Patterns and Authentication in Practical Programming Exams”. *Proceedings of the 2016 ACM Conference on Innovation and Technology in Computer Science Education, ACM, Peru.*
7. Samantha Khoury, **Alireza Ahadi**, Xiaoying Zhang and Nham Tran. **2016 “**Expression of microRNAs in HPV negative tonsil cancers and their regulation of PDCD4**”.** *Genomics Data doi:10.1016/j.gdata.2016.04.007.*
8. **Alireza Ahadi**, Samuel Brennan, Paul J. Kennedy, Gyorgy Hutvagner, Nham Tran. **2016** “Long non-coding RNAs harboring miRNA seed regions are enriched in prostate cancer exosomes**”**. *Sci. Rep.* **6**, 24922; doi: 10.1038/srep24922 (2016).
9. **Alireza Ahadi**, Arto Vihavainen, Raymond Lister. **2016**, “On the Number of Attempts Students Made on Some Online Programming Exercises During Semester and their Subsequent Performance on Final Exam Questions” *Proceedings of the* ***2016*** *ACM Conference on Innovation and Technology in Computer Science Education,* ACM, Peru*.*
10. **Alireza Ahadi**, Vahid Behbood, Julia Prior, Raymond Lister. **2016**, “Students’ Semantic Mistakes in Writing Seven Different Types of SQL Queries” *Proceedings of the 2016 ACM Conference on Innovation and Technology in Computer Science Education,* ACM, Peru*.*
11. Patrick Connerty, **Alireza Ahadi**, Gyorgy Hutvagner. “RNA Binding Proteins in the miRNA Pathway” *Int. J. Mol. Sci.* **2016**, *17*(1), 31; doi:10.3390/ijms17010031.
12. **Alireza Ahadi**, Vahid Behbood, Julia Prior, Arto Vihavainen, and Raymond Lister. “Students’ Syntactic Mistakes in Writing Seven Different Types of SQL Queries and Its’ Application to Predicting Students’ Success”. In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education*, pp. 401-406. ACM, **2016**.
13. Petri Ihantola, Arto Vihavainen, **Alireza Ahadi**, Matthew Butler, Jürgen Börstler, Stephen H Edwards, Essi Isohanni, Ari Korhonen, Andrew Petersen, Kelly Rivers, Miguel Ángel Rubio, Judy Sheard, Bronius Skupas, Jaime Spacco, Claudia Szabo, Daniel Toll **2015**, “Educational Data Mining and Learning Analytics in Programming: Literature Review and Case Studies” *Proceedings of the ITiCSE working group reports conference on Innovation and technology in computer science education-working group reports*, Innovation and technology in computer science education, ACM, Lithuania doi>**Error! Hyperlink reference not valid.**.
14. **Alireza Ahadi**, Raymond Lister, Heikki Happala and Arto Vihavainen. 2015, “Exploring Machine Learning Methods to Automatically Identify Students in Need of Assistance”. *Proceedings of the Eleventh Annual International Conference on International Computing Education Research, ACM, pp. 121-130.*
15. **Alireza Ahadi**, Julia Prior, Vahid Behbood and Raymond Lister. 2015, “A Quantitative Study of the Relative Difficulty for Novices of Writing Seven Different Types of SQL Queries”. *Proceedings of the 2015 ACM Conference on Innovation and Technology in Computer Science Education, ACM, Lithuania, pp. 201-206.*
16. Donna Teague, **Alireza Ahadi** and Raymond Lister. 2015, “ Mired in the web: Vignettes from Charlotte and Other Novice Programmers “. *17th Australasian Computing Education Conference (ACE 2015), 17th Australasian Computer Education Conference, ACS, Sydney, Australia, pp. 165-174.*
17. **Alireza Ahadi**, Donna Teague and Raymond Lister. 2014, “Falling Behind Early and Staying Behind When Learning to Program”. *Psychology of Programming Interest Group Annual Conference, Darwin College, Brighton, United Kingdom, pp. 77-88.*
18. **Alireza Ahadi**. 2014, “Applying Educational Data Mining to the Study of the Novice Programmer, within a Neo-Piagetian Theoretical Perspective”. *Philosophy of Programming Interest Group Doctoral Consortium (PPIG)*, *Darwin College, Brighton, United Kingdom*, 2014.
19. **Alireza Ahadi** and Raymond Lister. 2013, “Geek Genes, Prior Knowledge, Stumbling Points and  Learning Edge Momentum: Parts of the One Elephant? “.*Proceedings of the 2013 ACM Conference on International Computing Education Research ICER, ACM Conference on International Computing Education Research, ACM, San Diego, CA, USA, pp. 123-128.*
20. Donna Teague, Malcom Corney, **Alireza Ahadi** and Raymond Lister. 2013, “A Qualitative Think Aloud Study of the Early Neo-Piagetian Stages of Reasoning in Novice Programmers “.*Volume 136 - Fifteenth Australasian Computing Education Conference, Australasian Computing Education Conference, Australian Computer Society Inc, Adelaide, Australia, pp. 87-96.*

**Won the award for best paper**

1. Donna Teague, Malcolm Corney, **Alireza Ahadi** and Raymond Lister. 2012 “Swapping as the Hello World of Relational Reasoning:  Replications, Reflections and Extensions“.*Fourteenth Australasian Computing Education Conference (ACE2012), Australasian Computing Education Conference, Australian Computer Society Inc, Melbourne, Australia, pp. 87-94.*
2. Colin Fidge, Donna Teague, Malcom Corney, Mike Roggenkamp, **Alireza Ahadi** and Raymond Lister. 2012, 'Using Neo-Piagetian Theory, Formative In-Class Tests and Think Alouds to Better Understand Student Thinking: A Preliminary Report on Computer Programming', *Proceedings of the 23rd Annual Conference for the Australasian Association for Engineering Education - The Profession of Engineering Education: Advancing Teaching, Research and Careers*, 23rd Annual Conference for the Australasian Association for Engineering Education - The Profession of Engineering Education: Advancing Teaching, Research and Careers, Swinburne University of Technology, Melbourne, Australia, pp. 1-9.
3. Malcolm Corney,Donna Teague, **Alireza Ahadi** and Raymond Lister. 2012, “Some Empirical Results for Neo-Piagetian Reasoning in Novice Programmers and the Relationship to Code Explanation Questions". *Fourteenth Australasian Computing Education Conference (ACE2012), Australasian Computing Education Conference, Australian Computer Society Inc, Melbourne, Australia, pp. 77-86.*

**Won the award for best paper**