**CV**

|  |  |
| --- | --- |
| **Ahmad Alzghoul**  (+962) 796 24 2883  A.Alzghoul@psut.edu.jo  Amman, Jordan |  |

**Education**

2009-2013 **Luleå University of Technology, Sweden**

PhD degree in Computer Aided Design within the field of Computer Science and Engineering.

2008-2009 **Linnaeus University, Sweden**

Master degree in Software Technology.

2006-2007 **Halmstad University, Sweden**

Master degree in Computer Engineering. Specialized in intelligent systems.

|  |  |
| --- | --- |
| 2001-2005 | **Mutah University, Jordan**  Bachelor degree in Computer Engineering. |
| 2000-2001 | **High School, Jordan**  Scientific Stream. |
|  |  |

**Experience**

|  |  |
| --- | --- |
|  | **Princess Sumaya University for Technology, Jordan (2019-now)**   * Working as a lecturer at the department of Data Science.     **Wiraya Solutions AB, Sweden (2017-2019)**   * Wiraya is a mobile customer activation company that uses voice and text messaging to onboard customers, reduce churn, or move to digital large scale communication. * I Worked as a senior data scientist. * I was responsible for developing machine learning models to optimize when, what and how to communicate with each individual. * Also, analyse data from different customers such as Vattenfall, Telia, Circle K, etc. and provide recommendations.   **Moubi Analytics AB, Sweden (2017)**   * Moubi Analytics is a consulting company that provides services within the area of big data analysis and machine learning. * I was working as a senior data scientist. * At Moubi I have analyzed and developed prediction models for various business sectors. * I was also involved in the development of e2e pipeline (Python based code) for descriptive and predictive analysis. This includes for example profiling customer data, data cleaning, feature selection, correlation analysis, clustering, and tuning model parameters.   **Uppsala University, Sweden (2013-2015)**   * I worked as a researcher at the department of Information Technology. * The research involved the development of data stream queries using a stream query language to analyse industrial data streams and support industrial applications. Also, the research involved the verification and validation of the obtained results. * I was teaching and assisting in data mining and basic and advanced database courses. * I have done research in collaboration with the Pharmacy department at Uppsala University. The research involved the development of computational modelling which are based on statistical and machine learning algorithms. * Supervising/Reviewing bachelor and master theses.     **Luleå University of Technology, Sweden (2009-2013)**   * I had been employed as a PhD student. The position involved both research works and teaching tasks. * The research work involved the development of machine condition monitoring systems which are based on statistical analysis, data stream mining methods and data stream management systems (DSMSs). The research was in collaboration with Bosch Rexroth Company. * I had been assisting in the computer aided design course.   **Halmstad University, Sweden (2008)**   * I worked as a researcher in an industrial project at the department of Computer and Electrical Engineering. * I worked in the field of data mining in order to analyse data collected from printing press applications. The research involved the analysis of relation between various parameters characterizing the paper, printing press, the printing process and the breaking of a paper web when it is on-press. |

**Teaching Experience**

|  |  |
| --- | --- |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Course name** | **Level** | **Role** | **University** |
| 2021-2022 | Pattern Recognition | Advanced | Teacher | Princess Sumaya University for Technology |
| 2021-2022 | Data Engineering | Basic | Teacher | Princess Sumaya University for Technology |
| 2019-2021 | Database design | Basic | Teacher | Princess Sumaya University for Technology |
| 2019-2022 | Introduction to Data Science | Basic | Teacher | Princess Sumaya University for Technology |
| 2019-2021 | Object oriented programming | Basic | Teacher | Princess Sumaya University for Technology |
| 2019-2020 | Introduction to computer science | Basic | Teacher | Princess Sumaya University for Technology |
| 2014, 2015 | DataBase I | Basic | Teacher and Teaching assistant | Uppsala University |
| 2013, 2014 | Data Mining | Advanced | Teacher and Teaching assistant | Uppsala University |
| 2014 | DataBase II | Advanced | Teaching assistant | Uppsala University |
| 2010-2013 | Computer Aided Design | Basic | Teaching assistant | Luleå University of Technology |

|  |  |
| --- | --- |
| **Computer Skills:** Python Programming  C, C++ Programming  SQL Programming,  Matlab Programming  Java Programming  AmosQL Programming,  Matlab, Rapidminer, Minitab, Weka and SPSS data analysis tools  Jupyter /colab notebook  MySQL, Oracle and Amos II database systems  GIT (version control software) and Bitbucket  Familiar with JIRA (tracking and project management SW)  Familiar with Elasticsearch/kibana  Familiar with PEP-8 style guide (code standard)  Latex, Microsoft Office, OpenOffice, and Google Docs editing tools |  |
| **Peer-reviewed published journals**  A. **Alzghoul** et al. “On the Usefulness of Pre-processing Methods in Rotating‎ Machines Faults Classification using Artificial Neural Network”. Journal of Applied and Computational Mechanics, 2020  M. S. Mahmoud, A. Jarndal, A. **Alzghoul**, H. Almahasneh, I. Alsyouf and A. K. Hamid, "Driver Drowsiness Detection System Using Deep Learning Based on Visual Facial Features," 2021 14th International Conference on Developments in eSystems Engineering (DeSE), pp. 453-458, 2021  A. **Alzghoul** and M. Löfstrand, "Increasing availability of industrial systems through data stream mining," Computers & Industrial Engineering, vol. 60, pp. 195-205, 2011.  A. **Alzghoul**, M. Löfstrand, and B. Backe, "Data stream forecasting for system fault prediction," Computers & Industrial Engineering, vol. 62, pp. 972-978, 2012.  A. **Alzghoul**, B.Backe, M.Löfstrand, A. Byström. "Comparing a knowledge-based and a data-driven method in querying data streams for system fault detection: A hydraulic drive system application". Computers in Industry, vol.6(8), pp. 1126-1135. 2014  A. **Alzghoul**, M. Löfstrand. "Addressing concept drift to improve system availability by updating one-class data-driven models". Evolving Systems journal, vol. 6, 2014.  A. **Alzghoul**, A. Alhalaweh, D. Mahlin, C.A.S. Bergström. "Experimental and Computational Prediction of Glass Transition Temperature of Drugs". Journal of Chemical Information and Modeling. Vol.54 (12), 3396-3403, 2014.  A.Alhalaweh, A.**Alzghoul**, D.Mahlin, C.A.S. Bergström, “Physical stability of drugs after storage above and below the glass transition temperature: Relationship to glass-forming ability”, International Journal of Pharmaceutics, Vol. 495(1), pp. 312-317, 2015.  A. Alhalaweh, A. **Alzghoul**, W. Kaialy, D. Mahlin, C.A.S. Bergström."Computational Prediction of Glass-Forming Ability and Crystallization Tendencies". Molecular Pharmaceutics, 11 (9), 3123-3132, 2014.  A. Alhalaweh, A. **Alzghoul**, and W. Kaialy. "Data mining of solubility parameters for computational prediction of drug–excipient miscibility". Drug Development and Industrial Pharmacy, E-pubulication ahead of print, pp. 1-6, 2013.  A. Verikas, A. Gelzinis, M. Hllander, M. Bacauskiene, and A. **Alzghoul**, "Screening web breaks in a pressroom by soft computing," Applied Soft Computing Journal, vol. 11, pp. 3114-3124, 2011.  A. Alhalaweh, A. **Alzghoul**, C.A.S. Bergström., “Molecular Drivers of Crystallization Kinetics for Drugs in Supersaturated Aqueous Solutions”. Journal of Pharmaceutical Sciences.2018  **Conference papers**  A., **Alzghoul**, Alhalaweh, A., W., Mahlin, D., & Bergstrom, C.A.S. (2014) "Computational Prediction of Glass Transition Temperature of Drug Molecules". 2014 AAPS Annual Meeting and Exposition, San Diego, USA.  Alhalaweh, A., **Alzghoul**, A., Mahlin, D., Bergström, C.A.S. (2014). "Predictions of Glass-Forming Ability and Crystallization Tendency of Drug Molecules Using Support Vector Machine". 2014 AAPS Annual Meeting and Exposition, San Diego, USA.  Alhalaweh, A., **Alzghoul**, A., Mahlin, D., Bergström, C.A.S. (2014). "Prediction of Physical Stability of Drugs in the Amorphous State". 2014 AAPS Annual Meeting and Exposition, San Diego, USA.  **Alzghoul**, A., Löfstrand, M., Karlsson, L., & Karlberg, M. (2011). "Data stream mining for increased functional product availability awareness". In Functional Thinking for Value Creation (pp. 237-241). Springer Berlin.  A. **Alzghoul**, A. Verikas, M. MHallander, and A. Gelzinis (2009). "Screening Paper Runnability in a Web-Oﬀset Pressroom by Data Mining". Advances in Data Mining - Multimedia Applications and Theoretical Aspects: 9th Industrial Conference, ICDM 2009, Leipzig, Germany.  I. Alsyouf, **Alzghoul** A. (2009). "Soft computing applications in wind power systems: a review and analysis". In European offshore wind conference and exhibition. Stockholm, Sweden.  J. Lindström, M. Löfstrand, S. Reed, A. **Alzghoul** (2014) "Use of Cloud Services in Functional Products: Availability Implications", Procedia CIRP, Volume 16, 2014, Pages 368-372.  Alhalaweh, A., **Alzghoul**, A., Mahlin, D., Bergström, C.A.S. (2014). "In Silico Prediction of Glass Stability from Molecular Descriptors using Support Vector Machine". CRS Nordic Chapter Drug Transport and Delivery Symposium, Helsinki, Finland.  **Published theses**  "Mining data streams to increase ‎industrial product availability". Luleå: Luleå tekniska universitet, 2013. (Doctoral thesis / Luleå University of Technology, Sweden)  "Improving availability of industrial products through data stream mining". Luleå: Luleå tekniska universitet, 2011. (Licentiate thesis / Luleå University of Technology, Sweden)  "Time performance comparison in determining the weak parts in wooden logs". 2009. (Master thesis / Linnaeus university, Sweden)  Alzghoul, A. "Screening Web Breaks in a Pressroom by Soft Computing". 2008. (Master thesis / Halmstad university, Sweden) |  |