Hamid Saadatfar's Resume
Email: saadatfar@birjand.ac.ir, hm.saadatfar@gmail.com
Phone: +98-915-5611399
Address: Electrical and Computer Engineering Faculty, University of Birjand, Birjand, Iran

Education

- PhD in Computer Software, Ferdowsi University of Mashhad, 2014
- MSc in Computer Software, Ferdowsi University of Mashhad, 2009
- BSc in Computer Software, Ferdowsi University of Mashhad, 2007

Honors and Awards

- First place BSc graduate among 70 students, Ferdowsi University of Mashhad, 2007.
- First place MSc graduate among 12 students, Ferdowsi University of Mashhad, 2009.
- First place PhD graduate among 8 students, Ferdowsi University of Mashhad, 2014.
- Top researcher award for 2008 educational year, Ferdowsi University of Mashhad.
- Best professor award in the field of educational quality-enhancer activities, University of Birjand, 2021.
- Best professor award, University of Birjand, 2022.
- Best professor award, University of Birjand, 2023.

Publications in English

- Hamid Saadatfar, Hossein Deldari, and Mahmoud Naghibzadeh, "**Improving the scheduler's energy saving capability by noting both job and resource characterisitcs**", The Oxford Computer Journal, Vol. 58, No. 6, 2015, pp. 1482-1493.
- Hamid Saadatfar and Hossein Deldari, "**A job submission manager for large scale distributed systems based on job futurity predictor**", International Journal of Grid and Utility Computing, Vol. 5, No. 1, 2014, pp. 50-59.
- Hamid Saadatfar and Hossein Deldari, "**A study on combinational effects of job and resource characteristics on energy consumption**", Multiagent and Grid systems Journal, Vol. 9, No. 4, 2013, pp. 301-314.
- Hamid Saadatfar, Hamid Fadishei, and Hossein Deldari, "**Predicting Job Failures in AuverGrid Based on Workload Log Analysis**", New Generation Computing Journal, Vol. 30, no. 1, 2012, pp. 73-94.
- Shaghayegh Izadpanah, Hamed Vahdat-Nejad, and Hamid Saadatfar. "**A Framework for ranking ubiquitous computing services by AHP analysis**", International Journal of Modeling, Simulation, and Scientific Computing (2017): 1850023.
- Hamid Saadatfar, Hossein Salami, Hossein Deldari, Habib Rajabi Mashhadi and Farhad Rahmanifard, "**JSM: Job submission manager for large-scale distributed systems based on game theory**", 3rd International Conference on Advanced Computer Theory and Engineering (ICACTE), Vol. 5, pp. V5-549, IEEE, August 2010.
- Hossein Salami, Hamid Saadatfar, Farhad Rahmanifard, Seyed Kazem Shekofteh and Hossein Deldari, "**Improving cluster computing performance based on job futurity prediction**", 3rd International Conference on Advanced Computer Theory and Engineering (ICACTE), Vol. 6, pp. V6-303, IEEE, August 2010.
- Hamid Fadishei, Hamid Saadatfar, and Hossein Deldari, "**Job failure prediction in grid environment based on workload characteristics**", In Computer Conference, 2009. CSICC 2009. 14th International CSI, pp. 329-334. IEEE, 2009.

- Hamid Saadatfar, Hamid Fadishei, and Hossein Deldari, "**The Study of the Relations Between Grid Job Failure Patterns and Workload Characteristics**", IEEE IACC (International Conference on Advance Computing), Thaper University, Patiala, India, March 2009.
- Hamid Saadatfar, Mohammad Hossein Yaghmaee and Habib Rajabi Mashhadi, "**A fair active queue management approach based on supply and demand model**", 5th International Symposium on Telecommunications (IST), IEEE, 2010.
- Arash Deldari, Hamid Saadatfar, Mahmoud Naghibzadeh and Hossein Deldari, "**Agent-based k-nearest neighbor classifier for vertically distributed data sources** ", 4th international conference on information technology management, communication and computer, Tehran, Iran, pp. 36-43 June 2014.
- Seyyed Mehdi Hosseini, Javad Hassannataj Joloudari and Hamid Saadatfar, "**MB-FLEACH: A New Algorithm for Super Cluster Head Selection for Wireless Sensor Networks**", International Journal of Wireless Information Networks, Vol. 26, No. 2, 2019, pp 113–130.
- Eshan Shirzad and Hamid Saadatfar, "**A Study on MapReduce Job Failures in Hadoop**", International Journal Computer Modelling and New Technologies, Vol. 23, No. 1, 2019, pp 7-21.
- Saadatfar, H., Khosravi, S., Joloudari, J. H., Mosavi, A., and Shamshirband, S., "**A New K-Nearest Neighbors Classifier for Big Data Based on Efficient Data Pruning**", *Mathematics*, *8*(2), 2020, p 286.
- Taimouri, M., & Saadatfar, H. (2019). "**RBSEP: a reassignment and buffer based streaming edge partitioning approach**". *Journal of Big Data*, *6*(1), 1-17.
- Joloudari, J. H., Hassannataj Joloudari, E., Saadatfar, H., GhasemiGol, M., Razavi, S. M., Mosavi, A., Nabipour, N., Shamshirband, S. and Nadai, L. (2020). "**Coronary artery disease diagnosis; ranking the significant features using a random trees model**". *International journal of environmental research and public health*, *17*(3), 731.
- Joloudari, J. H., Saadatfar, H., Dehzangi, A., & Shamshirband, S. (2019). "**Computer-aided decision-making for predicting liver disease using PSO-based optimized SVM with feature selection**". Informatics in medicine unlocked, 17, 100255.
- Shamshirband, S., Joloudari, J. H., GhasemiGol, M., Saadatfar, H., Mosavi, A., & Nabipour, N. (2020). "**FCS-MBFLEACH: Designing an energy-aware fault detection system for mobile wireless sensor networks**". Mathematics, 8(1), 28.
- Gholizadeh, N., Saadatfar, H., & Hanafi, N. (2021). "**K-DBSCAN: An improved DBSCAN algorithm for big data**". The Journal of Supercomputing, 77(6), 6214-6235.
- Shirzad, E., & Saadatfar, H. (2020). "**Job failure prediction in Hadoop based on log file analysis**". International Journal of Computers and Applications, 1-10.
- Moodi, F., & Saadatfar, H. (2021). "**An improved K-means algorithm for big data**". IET Software.
- Foadaddini, A., Zolfaghari, S. A., Darian, H. M., & Saadatfar, H. (2020). "**An efficient GPU-based fractional-step domain decomposition scheme for the reaction–diffusion equation**". Computational and Applied Mathematics, 39(4), 1-35.
- Shirzad, E., Ataei, G., & Saadatfar, H. (2021). "**Applications of data mining in healthcare area: A survey**". Engineering and Applied Science Research, 48(3), 314-323.
- Shirzad, E., & Saadatfar, H. (2019). "**A study on MapReduce job failures in Hadoop**". Computer Modelling and new Technologies, 23 (1), 7-21.
- Saadatfar, H., & Khazaie, B. (2021). "**Workflow scheduling according to data dependencies in computational clouds**". Jordanian Journal of Computers and Information Technology (JJCIT).
- Hanafi, N., & Saadatfar, H. (2022) "A fast DBSCAN algorithm for big data based on efficient density calculation". Expert Systems with Applications 203, 117501.

- Mayabadi, S., & Saadatfar, H. (2022) "**Two density-based sampling approaches for imbalanced and overlapping data**". Knowledge-Based Systems 241, 108217.
- Foadaddini, A., Zolfaghari, S. A., Darian, H. M., & Saadatfar, H. (2022) "**A new GPU-based corrected explicit-implicit domain decomposition scheme for convection-dominated diffusion problems**". Computers & Mathematics with Applications, 123, 184-203.
- Mollashahi, H., Saadatfar, H., & Vahdatnejad, H. (2023) "**Summarization Algorithm for Data Stream to Speed up Outlier Data Detection**". Journal of Computing and Security, 10(1), 35-46.
- Alipour, S., Saadatfar, H. & Poor, M.K. (2023) "**A parallel multi-objective imperialist competitive algorithm to solve the load offloading problem in mobile cloud computing**". Neural Comput & Applic 35, 18905–18932.

مقالات به زبان فارسی

- **احسان شیرزاد، حمید سعادت‌فر، "تحلیل عوامل موثر بر عدم موفقیت برنامه‌ها در چارچوپ هادوپ بر اساس فایل‌های ثبت وقایع"، بیست و سومین کنفرانس سالانه انجمن کامپیوتر ایران، ص ۴۰۱-۴۰۶، دانشگاه صنعتی شریف، اسفند ۹۶، تهران.**
- **سلیمان کاهنی، حمید سعادت‌فر، "یک روش آینده‌نگر برای بخش‌بندی جریانی گراف‌های بزرگ"، چهارمین کنفرانس بین‌المللی پژوهش‌های کاربردی در مهندسی کامپیوتر و پردازش سیگنال، ص ۱-۱۲، آذر ۹۵، تهران.**
- **احسان شیرزاد، حمید سعادت‌فر، "مروری بر روش های پیش بینی خرابی در سیستم های توزیع شده مقیاس بزرگ"، مجله علوم رایانشی، شماره ۲۰، بهار ۱۴۰۰.**

کتاب‌ها

- **سید علیرضا ذوالفقاری، حمید سعادت‌فر، علی فوادالدینی، مبانی کاربردی استفاده از پردازنده گرافیکی برای محاسبات عددی در علوم مهندسی، انتشارات دانشگاه بیرجند، ویرایش اول، پاییز ۱۳۹۸.**

طرح‌های تحقیقاتی

- **حمید سعادت‌فر، حامد وحدت‌نژاد. چالش‌های امضاء دیجیتال و غصب هویت، سازمان کل ثبت احوال خراسان جنوبی، بهار ۱۳۹۷.**
- **حامد وحدت‌نژاد، حمید سعادت‌فر. تحلیل بستر شبکه اداره کل ثبت احوال استان خراسان جنوبی در جهت پیشبرد طرح ایمن سازی. سازمان کل ثبت احوال خراسان جنوبی، بهار ۱۳۹۷.**

پروژه‌ها

- **تحلیل داده‌های طرح کشوری سلامت سالمندان در همکاری با دانشگاه علوم پزشکی بیرجند**
- **تحلیل داده‌های بیماران کرونایی در همکاری با دانشگاه علوم پزشکی بیرجند**
- **تحلیل داده‌های مربوط به شرکت بیمه در راستای پیش‌بینی خسارت‌های ناشی از بیمه ماشین**
- **تحلیل داده‌های بیماران قلبی در همکاری با دانشگاه علوم پزشکی اصفهان**

Courses

- Game Theory
- Programming Basics
- Machine Learning
- Data Stores and Data Mining
- Technical language
- Computer Network
- Mobile and Wireless Network
- Grid Computing
- Research and Presentation Methods

Work Experience

- Director of Information and Communication Technology at University of Birjand from 2023
- Assistant professor of Computer Engineering Department at University of Birjand from 2015
- Head of Computer Engineering Department at University of Birjand from 2018 to 2023
- ACM programming team coach and supervisor at University of Birjand (17^{th}, 18^{th} and 19^{th} Asian Regional Contest)
- Technical Program Committee Chairman of The First Conference on Healthcare computing Systems and Technologies (CHEST 2019)
- Program Committee Member of 4^{th} conference on Information Technology, Computer & Telecommunication
- Advisor of Computer Engineering Scientific Association at University of Birjand from 2016
- Collaborate with several journals as reviewer

Research Interests:

- Parallel and distributed computing
- Big data processing
- Data Mining and Machine learning