Javad Dogani

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EDUCATION

2018-2023	PhD in computer engineering (Ranked) Shiraz University, Iran Thesis: Workload prediction and autoscaling techniques in cloud computing based on container virtualization Supervised by Dr. Farshad Khunjush.
2010-2012	MSc in computer engineering Shiraz University, Iran Supervised by Dr. Mohammad Hadi Sadreddini Thesis: Association Rule Mining in High-Speed Data Stream
2004-2009	BSc in computer engineering Shiraz Technical Collage, Shiraz, Iran Supervised by Dr. Mohammad Reza Moosavi Thesis: Analysis of Clustering Algorithms based on Nearest Neighbors Techniques

RESEARCH INTERESTS

Cloud Computing (Virtualization, Docker, Kubernetes), Edge/ Fog computing, Internet of Things (IoT) Big data analysis, Machine Learning, Federated Learning

PUBLICATION

Published:

Dogani J., Khunjush F., Seydali M., (2023) Host Load Prediction in Cloud Computing with Discrete Wavelet Transformation (Dwt) and Bidirectional Gated Recurrent Unit (BiGRU) Network, Journal of Computer Communication, Elsevier. https://doi.org/10.1016/j.comcom.2022.11.018

Dogani, J., Khunjush, F. & Seydali, M. (2022) K-AGRUED: A Container Autoscaling Technique for Cloud-based Web Applications in Kubernetes Using Attention-based GRU Encoder-Decoder. *Journal of Grid Computing* **20**, 40. https://doi.org/10.1007/s10723-022-09634-x

Dogani J., Khunjush F., Mahmoudi M. R., Seydali M., (2022) Multivariate Workload and Resource Prediction in Cloud Computing Using CNN and GRU by Attention Mechanism, Journal of SuperComputing, Springer. https://doi.org/10.1007/s11227-022-04782-z

Dogani, J., Farahmand, M., & Daryanavard, H. (2021). A new method to detect attacks on the Internet of Things (IoT) using adaptive learning based on cellular learning automata. *ETRI Journal*, *44*(1), 155–167. https://doi.org/10.4218/etrij.2021-0044

Dogani J., Khunjush F., Cloud Service Composition Using Genetic Algorithm and Particle Swarm Optimization, *2021 11th International Conference on Computer and Knowledge Engineering (ICCKE)*, 2021. https://doi.org/10.1109/ICCKE54056.2021.9721500

UnderReview:

Dogani J., Khunjush F., Seydali M., Proactive auto-scaling technique for web applications in container-Based Edge Computing using Federated Learning Model, Journal of Parallel and Distributed Computing (JPDC), Elsevier. (Major Revision)

Dogani J., Namvar R., Khunjush F., Auto-scaling techniques in Container-based Cloud and Edge/fog Computing: Taxonomy and Survey, Computer Communications, Elsevier. (Major Revision)

Dogani J., Yazdanpanah A., Khunjush F., Zare A., Two-tier Service Placement in Container-based Fog Computing using multi-Objective Optimization, Journal of Network and Computer Applications (JNCA), Elsevier.

Seydali, M., Khunjush, F., Akbari, B., **Dogani, J.**, CBS: A Deep Learning Approach for Encrypted Traffic Classification with a Mixed Spatio-Temporal and Statistical Features Classification. Available at SSRN, Journal of Computer Network, Elsevier, http://dx.doi.org/10.2139/ssrn.4189457

Daryanavard. H., **Dogani. J.**, A Hybrid PSO-GA Optimization Method for Relay Node Placement and Connection Point Detection in IoT Applications, Transactions on Emerging Telecommunications Technologies, Wiley. (Major Revision)

R. Salimi, S. Azizi, **J. Dogani**, Applying hybrid genetic algorithm and opposition-based learning for scheduling IoT tasks in green fog computing, Internet of Things, Elsevier.

P. Farzin, S. Azizi, **J. Dogani**, M. Shojafar, O. Rana, DCSP: A Delay and Cost-aware Service Placement Algorithm for IoT-based Fog Networks, Computer Communications, Elsevier.

Under Preparation:

Dogani J., Namvar R., Khunjush F., Adaptive Federated Learning Model for Joint Optimization of Energy Consumption and training time. Cyber Security Attack Detecting in Container-based microservices using clustering and Graph convolutional network (GCN).

Dogani J., Khunjush F., Cyber Security Attack Detecting in Container-based microservices using clustering and Graph convolutional network (GCN).

Dogani J. and Khunjush F., A Bi-metric Proactive Autoscaling for Function-as-a-Service (FaaS) platform Using Attention-based Bidirectional Gated Recurrent Unit (BiGRU).

Work Experience

2014-2018	A faculty member of Hormozgan University, Bandar-abbas, Hormozgan, Iran
2017-2019	Data Analyst and Programmer- Sinaweb Corporation, Tehran, Iran
2013-2014	Lecturer in Fasa University, Fasa, Fars, Iran
2012- 2013	Lecturer in Islamic Azad University, Fasa, Fars, Iran

SKILLS & EXPERTISE

Programming:	Python, C++, Java, R
Analysis:	Machine Learning, Data Mining, Deep Learning, Federated Learning, Split Learning
Big Data	Hadoop, Spark, Tensorflow, Spark

Operating Systems:	Linux, Windows
Database- related	SQL, SQLServer, SQLite, MongoDB
Cloud Computing	Virtualization, Docker, Kubernetes
Parallel Programming	Pthreads, OpenMP, MPI

TEACHING

2012- 2013	Principles of Programming Using Python, Advanced Programming Using Java, Principles of Data Base Systems, Algorithm Design	Fasa university, Iran
2014- 2015	Principles of Programming Using C, Advanced Programming Using Java, Principles of Data Base Systems, Algorithm Design, Data Structure	Hormozgan university, Iran
2015- 2016	Database Laboratory, Software Architecture, Operating Systems, Advanced Programming Using Java, Algorithm Design	Hormozgan university, Iran
2018- 2022	Data Mining, Principles of Programming Using C, Principles of Data Base Systems, Concurrent Programming, Design & Implementation of Programming Languages, Algorithm Design	Hormozgan university, Iran

REFERENCES

Farshad Khunjush, Associate Professor
Department of Computer Science and Engineering and IT, School of Electrical and Computer Engineering, Shiraz University
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Kuroosh Ziarati, Professor, Associate Professor
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Mohammad Hadi Sadreddini, Professor
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Hooman Tahayori, Assistant Professor
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