# Metehan GUZEL, Ph.D.


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Metehan Guzel
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## Employment History

2022 – · · · ·
**Research Assistant, Ph.D.**
Department of Computer Engineering, College of Engineering and Architecture
Kafkas University

2013 – 2022
**Research Assistant**
Department of Computer Engineering, Faculty of Engineering
Gazi University

2012 – 2013
**Game Developer**
CéiPrime Entertainment

## Education

2016 – 2022
**Doctor of Philosophy** in Computer Engineering
Computer Engineering Department, Graduate School of Natural and Applied Sciences
Gazi University
Thesis title: *Improving Quality of Service in IoT.*

2013 – 2016
**Master of Science** in Computer Engineering
Computer Engineering Department, Graduate School of Natural and Applied Sciences
Gazi University
Thesis title: *Very High Resolution Camera Hardware and Parallel Visual Database.*

2008 – 2012
**Bachelor of Science** in Computer Engineering
Computer Engineering Department, Faculty of Engineering
Gazi University
Thesis title: *Developing Graphics Engine with OPENGL.*

## Research Publications

### Journal Articles(SCI/SCI-E)


1. S. Dilek, K. Irgan, M. Guzel, S. Ozdemir, S. Baydere, and C. Charnsripinyo, "Qos-aware iot networks and protocols: A comprehensive survey," *International Journal of Communication Systems*, e5156, 2022.
2. M. Guzel and S. Ozdemir, "Fair and energy-aware iot service composition under qos constraints," *The Journal of Supercomputing*, pp. 1–28, 2022.
3. Y. Inag, M. Guzel, F. Y. Okay, M. Demirci, and S. Ozdemir, "Priority enabled content based forwarding in fog computing via sdn," *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 30, no. 4, pp. 1439–1459, 2022.
4. M. Guzel, I. Kok, D. Akay, and S. Ozdemir, "Anfis and deep learning based missing sensor data prediction in iot," *Concurrency and Computation: Practice and Experience*, vol. 32, no. 2, e5400, 2020.

### Conference Proceedings

1. M. Guzel, F. Y. Okay, I. Kok, and S. Ozdemir, "Qnsga-ii: A quantum computing-inspired approach to multi-objective optimization," in *2022 International Symposium on Networks, Computers and Communications (ISNCC)*, IEEE, 2022, pp. 1–4.
2. H. I. Dede, C. Timurkaan, M. Guzel, and S. Ozdemir, "A novel weighted fp-stream algorithm for iot data streams," in *2020 IEEE International Conference on Big Data (Big Data)*, IEEE, 2020, pp. 4553–4558.
3. M. Arslan, M. Guzel, M. Demirci, and S. Ozdemir, "Smote and gaussian noise based sensor data augmentation," in *2019 4th International Conference on Computer Science and Engineering (UBMK)*, IEEE, 2019, pp. 1–5.
4. B. Bagiroz, M. Guzel, U. Yavanoglu, and S. Ozdemir, "Qos prediction methods in iot a survey," in *2019 IEEE International Conference on Big Data (Big Data)*, IEEE, 2019, pp. 2128–2133.
5. M. Guzel and S. Ozdemir, "A new cep-based air quality prediction framework for fog based iot," in *2019 International Symposium on Networks, Computers and Communications (ISNCC)*, IEEE, 2019, pp. 1–6.
6. B. H. Corak, F. Y. Okay, M. Guzel, S. Murat, and S. Ozdemir, "Comparative analysis of iot communication protocols," in *2018 International symposium on networks, computers and communications (ISNCC)*, IEEE, 2018, pp. 1–6.
7. C. Uyar, I. Dervisoglu, M. Guzel, and S. Ozdemir, "Multi sensor based indoor positioning," in *2017 International Conference on Computer Science and Engineering (UBMK)*, IEEE, 2017, pp. 104–109.
8. M. Guzel and M. Unal, "A survey of insect eye inspired visual sensors," in *2015 9th International Conference on Electrical and Electronics Engineering (ELECO)*, IEEE, 2015, pp. 139–142.

### Book Chapters

1. I. Kok, M. Guzel, and S. Ozdemir, "Recent trends in air quality prediction: An artificial intelligence perspective," in *Intelligent Environmental Data Monitoring for Pollution Management*, Elsevier, 2021, pp. 195–221.
2. F. Y. Okay, I. Kok, M. Guzel, and S. Ozdemir, "Fog computing based complex event processing for internet of things," in *Big Data-Enabled Internet of Things*, IET-Institution of Engineering and Technology, 2019.

## Skills

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|---|---|
| Languages | **Turkish**, Native Speaker<br>**English**, Advanced (YDS-A Level)<br>**Japanese**, Elementary |
| Coding | Python, MatLab, C, C++, C#, Java |
| Misc. | Academic research, teaching, training, consultation |

## Projects

TUBITAK 1001

Project ID: 118E212
Project Title: Fog Computing Based Complex Event Processing and Content Curation for Internet of Things
Project Duration: 2018-2021
Role: Bursary

## Committee Work

2021 Organizing Commitee Member
6th International Conference on Computer Science and Engineering (UBMK)

2019 Organizing Commitee Member
International Symposium on Networks, Computers and Communications (ISNCC)