### **ABOUELHAMD, ISLAM**

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| Nationality: Egyptian  Birthday: 1993/01/30 (31 years old)  Residence: Fukuoka, Japan  Address: (810-0066), Chuo- ku Fukuhama 1-1-9, Apartment 214.  Phone: 090-3775-8073 (Japan).  Email: [abouelhamd@kyudai.jp](mailto:abouelhamd@kyudai.jp) / [abouelhamd.islam.272@s.kyushu-u.ac.jp](mailto:abouelhamd.islam.272@s.kyushu-u.ac.jp) |  |

# Work Expereisnce

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| **Research Assistant (Part time)** | **Kyushu University, IGSES, Department of Mechanical & Systems Engineering, Fukuoka (Japan)**  *Teaching and assisting in several research projects related to energy and environment using computational fluid dynamics tools (CFD) to undergraduate and Master students.* | **Apr. 2023 – Now** |
| **Assistant Lecturer** | **Assuit University, Department of Architectural and Urban Systems Engineering, Assuit (Egypt)**  *Teaching and assisting in several subjects for undergraduate students, such as indoor design, fluid dynamics, ventilation concepts, and environmental design.* | **Sep. 2015 – Sep. 2018**  **&**  **Apr. 2021 – Sep. 2022**  **(Study Leave)** |
| **Architectural Engineer.**  **(Part time)** | **BONIAN MISR for Architecture design, Urban planning, Engineering consulting and Real Estate investments, Assuit (Egypt)**  *Participated in several projects for two years duration through urban and architectural projects, visualization, and landscape planning* | **Nov. 2015 – Sep. 2018** |

# Education

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| **Ph.D. Degree** | **Kyushu University, IGSES, Department of Mechanical & Systems Engineering, Fukuoka (Japan)**  *By using in-silico application, I have conducted multiple research projects to investigate public health and thermal comfort in the semi-outdoor environments. The CFD was the main technique that I used (see the latest publications).* | **Oct. 2022 – Expected March 2025** |
| **M.Sc. Degree** | **Master's degree in Urban Development, Technical University of Berlin, TU-Berlin, (Germany).**  *Gained several experiences in terms of urban planning, urban ecology, urban analysis, BIM modeling, Energy Efficiency, environmental planning, urban economy, and project management.* | **Oct. 2018 – Feb. 2021** |
| **B.Sc. Degree** | **B.Sc. Degree of Architectural and Urban Engineering, Assiut University, Assiut (Egypt), Assuit (Egypt)**  *I have studied 57 subjects in 10 semesters (regular duration in Egypt) about building constructions, architectural design, theory and history of architecture, urban planning, and environmental designs.* | **Oct. 2010 – July 2015** |

# Languages

* ***Arabic****: Native Language*
* ***English****: High level in Listening, Speaking, Reading, and Writing (B2) [ILETS = 6.5]*
* ***Japanese****: Basic Communications (N4)*
* ***Germany****: Basic Communications (A2)*

# Latest Publications

Google Scolar URL: <https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AH70aAV_hypHxn_hAoKw7QnDInLAwVJa4gGvVMr0xBCklMg3fj1XhCj5ARpLOXNl-CacKYjH_JnNVFcdXyP8UVNG_pi2&user=1ppd7wcAAAAJ>

1. **Islam M. S. Abouelhamd**, Kazuki Kuga, Kazuko Saito, Megumi Takai, Takahiro Kikuchi, Kazuhide Ito. (2024). Odor Sensation tests (OSTs) vs. In-silico CFD-PBPK modeling towards high-definition quantification of olfaction dynamics. Preprint, *Proceedings of the National Academy of Sciences (PNAS)*.
2. **Islam M. S. Abouelhamd**, Kuga, K. and Ito, K. (2024). Convective heat transfer and drag coefficients of human body in multiple crowd densities and configurations in semi-outdoor scenarios. *Building and Environment*, 265, pp.111983–111983.

<https://doi.org/10.1016/j.buildenv.2024.111983>

1. **Islam M. S. Abouelhamd**, Kuga, K., Yoo, S.-J. and Ito, K. (2024). Effect of crowd density, wind direction, and air temperature on the formation of individual human breathing zones in a semi-outdoor environment. *Sustainable cities and society*, 103, pp.105274–105274. <https://doi.org/10.1016/j.scs.2024.105274>.
2. Kuga, K., Kizuka, R., **Islam.M.S. Abouelhamd**, and Ito, K. (2024). Aspiration efficiency and respiratory tract deposition of indoor suspended micro-particles during steady and transient breathings. *Building and Environment,* 249, p.111114. <https://doi.org/10.1016/j.buildenv.2023.111114>.
3. **Islam M. S. Abouelhamd,** Paulus van der Kuil, and Uwe-Jens Walthe (2023). Investigating the Influence of Urban Density and Concentrations on Commuting Distance and Time: Empirical Evidence from Suhag City. *Proceedings of International Exchange and Innovation Conference on Engineering & Sciences (IEICES)*, 9, pp.279–286.

<https://doi.org/10.5109/7157985>.

1. ‌ **Islam M.S. Abouelhamd**, Kuga, K., Yoo, S.-J. and Ito, K. (2023). Identification of probabilistic size of breathing zone during single inhalation phase in semi-outdoor environmental scenarios. *Building and Environment*, 243, p.110672.

<https://doi.org/10.1016/j.buildenv.2023.110672>.

1. Nyabonyi, R., **Islam M.S. Abouelhamd**, Madadi, V., Muriithi, P., Njiiri, P., Wanjohi, J.M. and D.O, F. (2023). The Legacy of urban sprawl on wildlife conservation: A case study of Nairobi National Park. Proceedings of International Exchange and Innovation Conference on Engineering & Sciences (IEICES), 9, pp.305–312.

<https://doi.org/10.5109/7157994>.

1. **Islam M.S. Abouelhamd** (2021). The relationship between urban spatial structure and commuting patterns: literature review*. JES. Journal of Engineering Sciences*, 49(5), 662-678.

# Computer Skills

* ***Applications:*** *CFD tools, Ansys-Fluent, Spaceclaim, Fortrun, Matlab, AutoCad,*

*3D-max, Revit, Envi-met, Design-builder, and GIS.*

# Profssional Skills

** ***Collaborative Teamwork****: Engaged with various associations to conduct multidisciplinary research projects.*

** ***Scientific Writing****: Experienced in writing, submitting, and publishing manuscripts in high-impact, peer-reviewed journals.*

** ***Problem-Solving Expertise****: Quickly analyze and resolve computational challenges using innovative solutions.*

** ***High-Performance Computing****: Proficient in utilizing supercomputers for solving complex fluid and particle dynamics simulations.*

** ***Cross-Cultural Collaboration****: Worked and studied in multinational teams, fostering positive and productive relationships.*

** ***Self-Management****: Strong organizational skills with the ability to manage tasks efficiently and maintain focus on objectives.*

# Conferences and Workshops

(Peer-Reviewed)

Indoor Air Conference: Sustaining the Indoor Air Revolution: Raise Your Impact

HAWAII, USA (2024)

International Conference for Neuclation and Atmospheric Aresols

Brisbane, Australia (2023)

The Second Memaryat International Conference: Architecture and Urban Resiliency, Jeddah, Saudi-Arabia (2018).

(Abstract-Reviewed)

Annual Conference for the indoor environment society in Japan.

Okinawa, Japan (2023)

Urban Mobility Mapping Workshop, Hurghada, (2019). Workshop to improve the quality of urban mobility mapping in Hurghada city in Egypt.

Waterfront For Everyone, Alexandria & Jeddah, (2018). A workshop with two phases, first phase in Alexandria, and the second phase in Jeddah, KSA.

# Honors and Awards

Inspire the Future Egypt. (BIM Competition), 2016 Using Revit Architectural Visualization Program to Design a Project which I Designed it. Vinsys – Autodesk company. 3rd Prize.

# References

**Prof. Kazuhide Ito**

Faculty of Engineering Sciences,

Kyushu University, Fukuoka 816-8580, Japan

Phone: [+81-(0)92-583-7628]

Email: [ito@kyudai.jp](mailto:ito@kyudai.jp)

**A. Prof. Kazuki Kuga,**

Faculty of Engineering Sciences,

Kyushu University, Fukuoka 816-8580, Japan

Phone: [+81-(0)92-583-7639]

Email: [kuga@kyudai.jp](mailto:kuga@kyudai.jp)

**A.Prof. Sung-Jun Yoo,**

Platform of Inter-/Transdisciplinary Energy Research (Q-PIT)

Kyushu University, Fukuoka 816-8580, Japan

e-mail : [yoo.sungjun.917@m.kyushu-u.ac.jp](mailto:yoo.sungjun.917@m.kyushu-u.ac.jp)

**Prof. Uwe-Jens Walther**

Former Head of the department of Urban and Regional Sociology,

Institute of Sociology

Technical University Berlin, Germany

E-mail: [uwe-jens.walther@campus.tu-berlin.de](mailto:uwe-jens.walther@campus.tu-berlin.de)

**Prof. Shawkat Elkady**

Head of the Department of Architectural Engineering

Assiut University, Egypt

E-mail: [shawkat@aun.edu.eg](mailto:shawkat@aun.edu.eg)