

Graduate School of Information Science, University of Hyogo 5th International Research Seminar

LARGE LANGUAGE MODELS AND LARGE **VISION MODELS: THEORY TO PRACTICE.**

Mon. 9 Sept. 2024 (13:00 ~ 14:00) JST

IN-PERSON/ONLINE SEMINAR

Large Language Models (LLMs) and Large Vision Models (LVMs) significantly advance natural language processing and computer vision. These models, often built upon extensive datasets and transformer-based algorithms, have demonstrated capabilities in understanding, generating, interpreting text and visual data. The transition from theoretical foundations to practical applications of these models has opened new avenues in various domains, including medical image analysis, education, heritage data, and more. This talk will explore the theoretical foundations, key developments, and real-world implementations of LLMs and LVMs, highlighting their transformative impact on technology and society.

Main points:

- Understanding Large Language Models
- Stages of building and using LLMs
- **Attention Mechanisms**
- Modifying a pre-trained LLM for fine-tuning
- LVMs: approaches, examples, use cases
- Domain-Specific Large Vision Models (LVMs)

Register here (free)

https://shorturl.at/WgZp4



Kobe Campus for Information Science, **Computational Science Center Building** Large Hall (720), 7th Floor https://www.u-hyogo.ac.jp/about/access/

Guest Speaker



Ghada Khoriba Associate Professor Nile University, Egypt



Dr. Ghada Khoriba was born and raised in Cairo, Egypt, where she demonstrated an early passion for technology and problem-solving. Her academic journey led her to the University of Tsukuba in Japan, where she earned her Ph.D. in Engineering and Computer Science in 2010. Dr. Khoriba's professional career is marked by a series of significant aca- demic and research positions. She is currently an Associate Professor at the School of Information Technology and Computer Science (ITCS) at Nile University in Egypt, a role she has held since 2022. Before this, she was the Head of the Artificial Intelligence Department at Ahram Canadian University and a part-time Computer Vision Researcher for the National Digitization Project under Egypt's Ministry of Communications and Information

Dr. Khoriba's research interests are diverse and cutting edge, encompassing medical image analysis, computer vision, machine learning techniques, deep learning mod swarm algorithms, natural language proc knowledge graphs. She has significantly contributed to the field through her numerous publications in high-impact journals and conferences. Dr. Khoriba's excellence in research has been recognized through various awards Notably, she was named one of the top 40 researchers with high field impact at Helwan University. Recently, a notable highlight in her career was her publication at the Neural Information Processing Systems (NeurIPS) conference, one of the most prestigious and competitive conferences in artificial intelligence and machine learning

Dr. Khoriba is a member of the IEEE Computationa Intelligence Society and the Association for Computing Machinery (ACM). She holds certifications as an IBM Artificial Intelligence Analyst and IBM Bloc Developer, demonstrating her commitment to staying at the forefront of technological advancements

For more details:

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