

USHTAR ALI

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Tsukuba City, Ibaraki Prefecture, Japan

Date of Birth: January 1, 1998 ◇ Nationality: Pakistani

EDUCATION

University of Tsukuba, Japan

Ph.D. Computer Science

Research Topic: Aligning Large Language Models with Knowledge Graphs

04-2024 - expected 03-2027

Supervisor: Toshiyuki Amagasa

University of Central Punjab Lahore, Pakistan

M.Phil. Computer Science

Thesis Title: Opinion Mining of Socio-Political Tweets using BERT Embeddings

10-2020 - 08-2023

GPA: 3.73/4.00

PMAS Arid Agricultural University Rawalpindi, Pakistan

B.S (Hons) Computer Science

Artificial Intelligence, Programming & Management subjects

2016 - 2020

GPA: 3.00/4.00

PROFESSIONAL EXPERIENCE

1. Research Assistant, National Institute of Advanced Industrial Science and Technology (AIST), Japan 07-2024 - present

- Conducting research and publishing research papers.
- Applying graph processing techniques to LLM modeling approaches.
- Developing methods for aligning LLM hallucinations with graph modeling techniques.
- Performing data analysis to support experiments and evaluate model performance.

2. Research Assistant, University of Tsukuba, Japan 04-2026 - present

- Conducting research and publishing research papers.
- Developing methods for aligning LLM hallucinations with graph modeling techniques.

3. Teaching Assistant, University of Tsukuba, Japan 09-2024 - present

- Supporting instructors in conducting research seminars during the Fall semester.
- Sharing evaluated reports with students.
- Handling student queries.

4. Data Analyst, eConceptions Islamabad, Pakistan 08-2022 - 03-2024

- Writing Python scripts for data analysis and predictive modeling.
- Creating and managing dashboards for real-time data analysis.
- Creating and managing databases using MySQL.
- Collaborating with product teams.
- Scheduling hourly, daily, and monthly reports.

- Conducting ITC and C++ labs.
- Preparing lab materials and developing their solutions using C++.
- Handling student queries.

PUBLICATIONS AND SUBMISSIONS

1. **Entropy-Guided Probing for Predicting LLM Hallucinations with Knowledge Graph Features**
 - Published in the 36th International Conference on Database and Expert Systems Applications (DEXA 2025).
2. **When Structure Predicts Hallucination: Aligning LLMs with Knowledge Graph Features**
 - Published in Data & Knowledge Engineering Journal.
3. **Knowledge Graph Adapter-Based Augmentation Testbed for Large Language Models**
 - Published at the 37th International Conference on Database and Expert Systems Applications (DEXA 2026).
4. **When to Inject: Gated Adapter-Based Selective Knowledge Graph Augmentation for Large Language Models**
 - Submitted to the 43rd IEEE International Conference on Data Engineering (ICDE 2027).
5. **Knowledge Graph-Guided Multi-Hop Probing for Hallucination Detection in Large Language Models**
 - Submitted to the 2nd Workshop on Graph-Enhanced LLMs for Trustworthy Web Data Management (GLOW 2026), co-located with ISWC 2026.
6. **Multi-Hop Corpus for Detecting LLM Hallucinations**
 - Presented as a paper and poster at the DEIM 2025 Conference, Fukuoka, Japan.
7. **Risk-Aware KG Adapter for Improving LLM Accuracy**
 - Presented as a paper and poster at the DEIM 2026 Conference, Kobe, Japan.

THESES

1. M.Phil. Thesis: “Opinion Mining of Socio-Political Tweets Using BERT Embeddings”.
2. Bachelor’s Project: “Location Finder for Urban Planning”.

PROJECTS

Research Projects

1. Hate Speech Detection from Urdu Text Using Machine Learning.
2. Software Requirements Prioritization Using Machine Learning.
3. Location Finder for Urban Planning.

Programming Projects

1. LLM Hallucination Detection.

2. KG-LLMs Augmentation.
3. Real-Time Weapon Detection Surveillance System.
4. Dashboard Development for Analyzed Data.

WORKSHOPS

Role of Robotics in Human Life, Robotics Lab, University of Central Punjab, Lahore, Pakistan
Attended a three-day workshop on the role of robotics in human life. The workshop provided an introduction to robotics concepts, applications, and their relevance to modern society.

SKILLS

Programming Languages Python, C++, SQL

Artificial Intelligence and Machine Learning Machine Learning, Deep Learning, Large Language Models, Natural Language Processing, BERT

Knowledge Graphs and Data Management Knowledge Graphs, RDF, Graph Processing, MySQL, Data Analysis

Tools and Frameworks GitHub, Jira, Linux, NumPy, Pandas, Microsoft Office, Slack

Languages English, Urdu, Punjabi

AWARDS AND CERTIFICATIONS

1. **MEXT Scholarship**, Ministry of Education, Culture, Sports, Science and Technology, Japan
04-2024 – Present
2. **Pearson Test of English Academic** *02-05-2023* Scored 69 in PTE Academic, which is approximately equivalent to IELTS Band 7.
3. **English Access Micro-Scholarship Program** *2012 – 2014* Completed a two-year English Access Micro-Scholarship Program in DG Khan, Pakistan.
4. **Merit Scholarship**, University of Central Punjab
5. **Python Programming Basics Certificate**, Huawei Completed training in the fundamentals of Python programming.
6. **Machine Learning Certificate**, Stanford University
7. **Power BI for Beginners Certificate**, Simplilearn
8. **Power BI Certificate**, SkillUp

LINKS & REFERENCES

 [Website](#)  [Google Scholar](#)  [ResearchGate](#)  [LinkedIn](#)