Kashif Rabbani

Address: Aalborg, Denmark • **Email**: kashifrabbani@cs.aau.dk • **Website**: https://kashif-rabbani.github.io/

Area of Expertise	Databases, data warehouse, architecture design, Big Data processing, data integration, query optimization, databases, Semantic Web, schema extraction, polystores, knowledge and ontology engineering
Skills	**Java, Python, SQL, BPMN, SQLite, SPARQL, Graph Analytics, ETL, Weka, RapidMiner, Tableau, Cloud Services, Web development**

Work Experience

09/2020 — Current

PhD Fellow, Dept. of Computer Science, Aalborg University, Denmark
I am part of Data, Knowledge, and Web Engineering (DKW) research group and my PhD studies include proposing efficient and scalable solutions for schema extraction and query optimization in graphs.

10/2019 — 08/2020

Scientific Research Assistant, Dept. of Computer Science, Aalborg University, Denmark
I was managing the existing research projects and analyzing state-of-the-art in query optimization in databases and graphs.

06/2018 — 10/2018

Data Engineer (Intern), everis NTT Data Company, Barcelona, Spain
everis NTT DATA Company is dedicated to consulting and outsourcing in all sectors. I was working in a Semantic Business Unit (SEMBU) in EU-CORDIS linked open data project. My major responsibilities were designing a scalable architecture and proposing an end-to-end solution for EU-CORDIS research projects.

01/2016 — 09/2017

Software Engineer, eConceptions pvt Ltd, Islamabad, Pakistan
eConceptions deals in VAS (Value Added Services) including SMS, IVR and Mobile Apps. I was responsible for developing and maintaining SMS Services and Mobile Applications. Major responsibilities were to provide back-end services for mobile applications and meeting requirements from telecom operators on regular basis.

08/2015 — 09/2015

Web Developer (Intern), eConceptions pvt Ltd, Islamabad, Pakistan
I had been working on web related ongoing projects, e.g., designing, deploying, and maintaining web applications for clients.

Education

01/09/2017 — 31/08/2019

Masters in Big Data Management and Analytics (Computer Science), *TU-Berlin, Germany*
Thesis: 'Supporting the Semi-Automatic Creation of Schema in Data Integration Systems'
Final Grade: 1,4 (Sehr gut/very good)

01/09/2015 — 31/07/2018

Bachelors in Computer Science, *COMSATS University, Islamabad, Pakistan*
Final Grade: 3.84/4.00 CGPA (Campus Gold Medal & Institute Silver Medal)

Teaching & Supervision

Fall 2021 & Fall 2022
BSc Course

Teaching Assistant, **Database Management System** course for BSc in Software Engineering at **Aalborg University**
Responsibilities: Exercise sessions

Fall 2021, 2022, 2023
BSc Project

Group Supervisor, **Knolwedge Engineering Toolbox** for BSc in Software Engineering at **Aalborg University**
Total of 2 student groups with 5-7 in each group

Spring 2021
BSc Project

Group Supervisor, **Analyzing large scale ships AIS data** final semester project for BSc in Software Engineering at **Aalborg University**
Total of 3 student groups with 4 in each group

Achievements

Grants

PhD Study Abroad Travel Grants 2023
I was awarded travel grants by Otto Mønsted and Danish Data Science Academy for study abroad during my PhD studies.

Award

Big Data Talent Awards 2019 (Runner-up)
I was selected as a runner-up for Big Data Talent Awards 2019 at UPC Barcelona, Spain, for my master thesis.

Scholarship

Erasmus Mundus Scholarship
I was awarded a fully funded scholarship for my master's degree in Big Data Management and Analytics.

Medals   Gold and Silver Medals
I won a campus Gold Medal award and an institute Silver Medal award at COMSATS University Islamabad,
Pakistan, for the highest CGPA: 3.84/4.00 (Batch Spring 2013-17) of my Bachelor's degree.

Others

External Reviewer   ISWC'22, VLDB'22, SIGMOD'22

Languages   English (C1), Danish (PD-3)

Publications

2023   [1] 'SHACTOR: Improving the Quality of Large-Scale Knowledge Graphs with Validating Shapes',
Kashif Rabbani, Matteo Lissandrini, and Katja Hose, *In Proceedings of the 2023 International
Conference on Management of Data, (SIGMOD-Companion '23) June 18-23, 2023, Seattle, WA, USA*

2023   [2] 'Extraction of Validating Shapes from very large Knowledge Graphs', **Kashif Rabbani**, Matteo
Lissandrini, and Katja Hose, *In Proceedings of the Very Large Databases 2023 (Volume 16 Issue 5,
VLDB-2023) August 2023, Vancouver Canada.*

2023   [3] 'Incremental Schema Integration for Data Wrangling via Knowledge Graphs', Javier Flores
Kashif Rabbani, Sergi Nadal, Cristina Gómez, Oscar Romero, Emmanuel Jamin, and Stamatia
Dasiopoulou, *In Semantic Web Journal 2023.*

2022   [4] 'SHACL and ShEx in the Wild: A Community Survey on Validating Shapes Generation and
Adoption', **Kashif Rabbani**, Matteo Lissandrini, and Katja Hose, *In Companion Proceedings of the
Web Conference (**WWW**), 2022.*

2021   [5] 'Optimizing SPARQL Queries using Shape Statistics', **Kashif Rabbani**, Matteo Lissandrini, and
Katja Hose, *In Proceedings of the 24th International Conference on Extending Database Technology.
(**EDBT**), 2021.*

2019   [6] 'ODIN: A dataspace management system', Nadal Francesch Sergi, **Kashif Rabbani**, Óscar
Romero Moral, and Shumet Tadesse Nigatu, *In Proceedings of the ISWC 2019 Satellite Tracks
(Posters & Demonstrations, Industry, and Outrageous Ideas) co-located with 18th International Se-
mantic Web Conference (**ISWC**), 2019.*

2019   [7] 'ARDI: Automatic Generation of RDFS Models from Heterogeneous Data Sources', Shumet
Tadesse, Cristina Gómez, Oscar Romero, Katja Hose, **Kashif Rabbani**, *In IEEE 23rd International
Enterprise Distributed Object Computing Conference (**EDOC**), 2019.*