

Tarique Khan

Software Engineer/ Computer Scientist

✉ khantarique450@gmail.com

📍 Bologna, Italy

🌐 linkedin.com/in/tariquekhan12



📁 WORK EXPERIENCE

Research Software Engineer, CMCC

03/2025 – present | Bologna, Italy

PhD Researcher In Information Engineering,

Università Politecnica delle Marche

11/2020 – 03/2025 | Ancona, Italy

- actively engaged in research-related activities, demonstrating initiative and contributing valuable insights.
- conducted literature reviews, gathered data, and performed data analysis.
- developed an application for KPIPEDIA using PHP and Laravel.

Software Engineer/ Computer Scientists,

IPK Leibniz-Institut

02/2023 – 01/2024 | Gatersleben, Germany

- contributed to the development of e!DAL, a framework for storing, sharing, and publishing research data
- used different technologies, including Java, Spring Boot, Hibernate, and J2EE

Technical consultants,

Innovative Channels (Pvt) Ltd

10/2016 – 08/2017 | Karachi, Pakistan

- gathering requirements from the client.
- deploying reports using Oracle EBS
- developing and updating reports using SQL and PLSQL.

🎓 EDUCATION

Master of Engineering, Beijing University of

Posts & Telecommunication (BUPT)

2017 – 2019 | Beijing, China

Bachelor of Engineering (Software

Engineering), Mehran University of

Engineering Technology (MUET)

2012 – 2015 | Jamshoro, Pakistan

🌐 LANGUAGES

English



Italian



German



Pushto



Urdu



📁 PROJECTS

e!DAL (electronic Data Archive)

- Developed API specifications using Swagger, integrated e!DAL endpoints, and enhanced data management through third-party authentication and authorization functionalities.

KPIPEDIA

- KPIPEDIA is a user-friendly platform designed to simplify the management of indicators.
- It aims to provide an easily accessible repository of indicators, allowing users to efficiently find and contribute to the indicator ecosystem.

Master Thesis: Keyword Extraction Using A Graph-Based Approach

Python, Data preprocessing, and Extraction.

Bachelor Thesis: Text Spy, An OCR based Android Application

- Designed and developed an optical character recognition application (Text Spy) that allows users to convert physical documents into digital text files (such as .txt, .pdf, etc.) using an Android device camera
- Implemented specifically for Android phones using Java and SQLite

🧠 SKILLS

Java/Kotlin

(Spring Boot, Spring Framework)

PhP

(Laravel)

Python, R

(Jupyter Notebook)

Database/DBMS

(MySQL/SQL/PostgreSQL)

HTML, CSS, JavaScript, Bootstrap

Testing

Junit

Version Control

Git, GitHub, GitLab, Bitbucket

Swagger OpenAPI

CI/CD, Linux/Unix

Soft Skills

(Team Work, Multitasking, Communication, Friendliness and Manners)

PUBLICATIONS

A Novel Approach to KPI Extraction and Validation Using Semantic Technologies,
Springer Nature (Under Review)
2025

Semantic Models of Performance Indicators: A Systematic Survey,
ACM Computing Survey 
2025

Predictive Modeling of Key Performance Indicators for Greenhouse Gas Emission Reduction Using Machine Learning 
2024

Forecasting of Key Performance Indicators Based on Transformer Model 
2024

Enhancing KPI Forecasting Through Regression Algorithms Using Historical Data 
2024

Semantic Representation of Key Performance Indicators Categories for Prioritization. 
2023

Shared Metrics of Sustainability: A Knowledge Graph Approach 
2022

Keyword Extraction Using Graph-Based Approaches”, International Journal of Scientific & Engineering Research 
2019

AWARDS

Best Student Award, Beijing University of Post and Telecommunication (BUPT)
2019

International Scholarship,
China Government Scholarship Council (CSC)
2017

EXTRACURRICULAR ACTIVITIES

International Student Representative
2017 – 2019 | Beijing, China

Volunteer in Event Synergy'14 , MUET, Jamshoro
2014 | Jamshoro, Pakistan

Volunteer in GSCC'15, MUET, Jamshoro (Grand Software Champ Camp)
Jamshoro, 2015

INTERESTS

Football

Traveling

Photography

Cricket