

Education:

Masters in Computer Science	Paderborn University, Germany	Mar 2018 - Sept 2021
Bachelors in Computer Engineering	Sir Syed University of Engineering, Pakistan	Jan 2012 - Dec 2015

Experience:

Data Engineer **GROPYUS GmbH, Germany** May 2022 – Present

- Working with knowledge graphs to enable next-gen data driven construction and smart buildings.

Student Research Assistant **DICE Research Group, Germany** July 2020 – September 2021

- Extension to master's project group hence contributed to the further development of IDA chatbot.

Software Engineer **Syqlo.de, Germany** June 2018 – June 2020

- Developed a web-based manager for a house connection surveying app using Angular and Firebase.

Software Developer Engineer **Symantec Inc, Pakistan** November 2016 – March 2018

- Worked on a real-time dashboard using tools including Angular 1, Python's Django and MongoDB.

NodeJS Developer **Interactive Cells, Pakistan** March 2016 – October 2016

- Worked with NodeJS to develop REST APIs and migration scripts for an Ad-tech startup.

Projects:

RDF-to-Text (NLG task) **Master's thesis (grade 1.5)**

- Researched RDF-to-text generation task using state-of-the-art ML method. Develop solution in pipeline fashion using Pytorch and WebNLG corpus.

IDA **Master's project (grade 1.3)**

- A chatbot for data-scientists, Co-lead the team of 8 fellow students and developed visualizations and Natural Language Engine. Project Site: github.com/dice-group/ida-pg

Project NLP **Personal project**

- A project where I am implementing basic tasks of NLP e.g., Classification using statistical and deep learning approaches. Project Site: github.com/maqbookhan/project-NLP

Project NMT **Personal project**

- A project to explore LSTM, Transformer, pre-trained word embeddings and models for Neural Machine Translation task from scratch using Pytorch and hugging face. Project Site: github.com/maqbookhan/nmt

A Web Search Engine **Bachelor's final year project**

- A search engine focused on query understanding and grouping relevant results. Developed using NLTK, Flask, Nodejs and Elasticsearch DB.

ACCS **Personal project**

- A Rapid Microsoft word document format changer. Project Site: maqhq.blogspot.com

Oranje **Personal Project**

- The Simplest Java Code Editor Project Site: oranjehq.blogspot.com

Skills:

Programming Languages	Python	Javascript	Java		
Python Frameworks	Pytorch	Scikit-Learn	Numpy	Pandas	NLTK
	RDFLib	FastAPI	PyTest		
ML/NLP	Transformer	BERT	LSTM	NMT	Attention
	Word embeddings	Sequence to Sequence models			
Databases	Triple stores	Elasticsearch	MongoDB		
Tools	Docker	Git	Regex	AWS (Sagemaker. & EC2)	
	Jupyter Notebooks	CI/CD			

Extra Circular Activities:

- **Student at ACL Mentorship program** (Aug 2021)
- **First Pakistani Winner of Firefox OS Global App Dev Competition** (Nov 2014)
- **Third Position in two days Scayle Hackathon** (Nov 2016)