

# Shabbar Raza

Address: Wiesbadener Strasse 9, 28199 Bremen, Germany

☎ +49 (176) 6699 8518 | ✉ mail@shabbaraza.me | 🏠 ShabbarRaza.me | 📱 ShabbarRazaPk94 | 🌐 ShabbarRazapk94

## Education

### Jacobs University

*Bremen, Germany*

B.Sc. IN COMPUTER SCIENCE, CLASS OF 2017

*08/2014 - 08/2019*

- Notable Courses: Algorithms and Data Structures • Formal Languages and Logic • Computability and Complexity • Machine Learning • Operating Systems Lecture and Lab • Electrical Engineering Lecture and Lab • Programming in C++ • Programming in Java • Software Engineering Lecture and Lab • Statistical Concepts and Data Analysis • Databases and Web Applications • IT Management

### Keynesian Institute of Management and Sciences (KIMS)

*Lahore, Pakistan*

CAMBRIDGE INTERNATIONAL GENERAL CERTIFICATE OF EDUCATION A LEVEL - 3 AS

*08/2012 - 08/2014*

- Second Highest Achiever in class

### Garrison Academy for Boys

*Lahore, Pakistan*

CAMBRIDGE INTERNATIONAL GENERAL CERTIFICATE OF EDUCATION O LEVEL - 10 A\*/AS, 1B

*08/2008 - 08/2011*

- Highest Achiever in class

## Practical Experience

### HR Forecast

*Bremen, Germany*

PROJECT MANAGER/SOFTWARE DEVELOPER

*01/2018 - 08/2019*

- Supervised software product development for projects involving experts from diverse scientific and technical backgrounds.
- Revamped software security and data protection frameworks for enterprise solutions.
- Worked on data acquisition, mining, and analysis projects.
- Implemented REST APIs and other applications for information retrieval and presentation.

### DFKI - Robotics Innovation Center

*Bremen, Germany*

VOLUNTARY INTERN

*06/2016 - 08/2016*

- Worked on modelling and simulation of robot components using URDF and Solidworks.
- Worked on documentation of software which served as prototype implementation for a project on human-computer interaction.

### Fraunhofer - Mevis

*Bremen, Germany*

INTERN

*06/2016 - 08/2016*

- Worked on building a web application using Django framework.
- Wrote installation scripts for a server setup for both Ubuntu and Windows.

### Jacobs University

*Bremen, Germany*

PRESIDENT - UNDERGRADUATE STUDENT GOVERNMENT (USG)

*09/2016 - 09/2017*

- Served as the head of Undergraduate Student Government which is the representative organization of all undergraduate students at Jacobs University Bremen.
- Facilitated communication between university administration and the student body.
- Introduced reforms in USG elections, finance management, disciplinary regulations, outreach methods, having impact on the USG, the student body, and the University at large.

### Lahore University of Management and Sciences (LUMS)

*Lahore, Pakistan*

INSTRUCTOR AT LUMS MODEL UNITED NATION (LUMUN) - SOCIAL RESPONSIBILITY PROGRAM

*06/2013 - 07/2013*

- Designed curriculum and tutored a group of underprivileged students at a charity summer school.
- Planned and supervised educational activities, such as memory exercises, and number games.

## Project Experience

### Guided Research - Bachelor Thesis

Jacobs University, Bremen

"EXPLORING THE FEASIBILITY OF AUTOMATICALLY FINDING ALIGNMENTS ACROSS MATHEMATICAL LIBRARIES"

04/2017 - 08/2017

- Carried out research on construction of mathematical libraries represented in MMT and on the topic of *alignments*.
- Wrote an algorithm that outputs alignments among mathematical theories.
- Wrote a word segmentation algorithm using dynamic programming approach, optimized for the specific flavour of input strings.

### Maze Runner Robot

Jacobs University, Bremen

SOFTWARE THAT ENABLES A ROBOT WITH A LASER RANGE FINDER TO AUTONOMOUSLY FIND ITS WAY OUT OF A MAZE

03/2016 - 04/2016

- Wrote separate packages for parsing and analysis of scanned data from sensors, and for inference and execution of decisions.
- Learned and practiced software modularization, testing, documentation, and project management methodologies.
- <https://github.com/JacobsUniversitySELab2016S/se-lab-team-6>

### MusicBall

Jacobs University, Bremen

AN AUDIOVISUAL MUSICAL INSTRUMENT

01/2016 - 01/2016

- Designed and implemented an application that produces different sounds and corresponding visual effects upon different inputs.
- Learned to program sounds and graphics, and to use object classification in a new domain while working with Processing.
- <https://github.com/mgladkova/musicBall>

### MUNManager

Jacobs University, Bremen

A WEB APPLICATION AS A MANAGEMENT PLATFORM FOR THE ATTENDANTS AND ORGANIZERS OF MUN CONFERENCES

10/2015 - 12/2015

- Designed and implemented the database and wrote queries for particular tasks.
- Used GoogleMaps API with JavaScript to add one-click display of geographical location of the MUN conferences.
- Used JQuery with Bootstrap for pop-up forms, sliding menu, and navigation between sections.
- <https://github.com/nickles-lee/ConCordinate>

## Skills and Achievements

### AWARDS

- 2017 **Cultural Understanding and Diversity Award**, Jacobs University Bremen
- 2013 **Best Intern Award**, LUMUN - Social Responsibility Program
- 2012 **43rd Position Nationally**, Kangaroo International Mathematics Contest

Bremen, Germany

Lahore, Pakistan

Lahore, Pakistan

### PROGRAMMING

**Advanced knowledge:** C, C++, Java, SML, Scala, JavaScript,  $\text{\LaTeX}$ , Git, Multi-Threaded Programming, DevOps, AWS, IaC

**Working knowledge:** C#, Python, R, Matlab, SQL, PHP, Docker, Kubernetes, Prolog, REST, JDBC, SOAP, Arduino, ROS, HTML5

**PC KNOWLEDGE** Linux, Apache, NGINX, Solidworks, Tableau, Zeplin, Microsoft Power BI, Access, Excel, Word, and PowerPoint.

### LANGUAGES

**English** native/bilingual

**Punjabi** working knowledge

**German** professional proficiency

**Hindi** working knowledge

**Urdu** native/bilingual

**INTERESTS AND HOBBIES** Event Management, Photography, Oratory, Poetry, Badminton, Biking

S. Shabbar Raza

**Shabbar Raza**

Bremen, November 25, 2019.