



# Ranji Raj Nair

Arnold-Zweig Street.30, 39120, Magdeburg, Germany  
 +49 1590 6347223  
 ranjiraj4141@gmail.com

## Social Network

YouTube Channel  
 LinkedIn Profile  
 Github Profile

## Languages

German ● ● ● ● ●  
 English ● ● ● ● ●

## Programming Skills

Python ● ● ● ● ●  
 R ● ● ● ● ●  
 Tableau ● ● ● ● ●  
 SQL ● ● ● ● ●

## Soft Skills

Teaching ● ● ● ● ●  
 Communication ● ● ● ● ●  
 Analytical ● ● ● ● ●

## Other Competencies

Machine Learning ● ● ● ● ●  
 Deep Learning ● ● ● ● ●  
 Keras ● ● ● ● ●  
 Tensorflow ● ● ● ● ●  
 Linux ● ● ● ● ●  
 Docker ● ● ● ● ●  
 Kubernetes ● ● ● ● ●  
 Scikit-learn ● ● ● ● ●

## Working Experience

2016 – 2018 **QualityKiosk Technologies Pvt.Ltd.** Role: Test Engineer  
Virtualization of services for various private banking applications by creating mock responses and stub creation using licensed and open source tools to test web services. Performed system monitoring to determine the performance bottlenecks through client coordination.

## Education

### Study Programmes

2019 – pursuing **Master Studies** Otto von Guericke University  
Focus: Data and Knowledge Engineering

2012 – 2016 **Bachelor Studies** Datta Meghe College of Engineering  
Focus: Information Technology

2000 – 2012 **Primary and Secondary Schooling** SIO's Vani Vidyalaya

## Projects

Master emoji voto - a simple example application containing three dockerized microservices and a website. Website illustrating list of emojis you can vote for and a leaderboard with the emojis with the highest votes with the full-fledged application running on SysEleven cluster.(Application environment was on Linux, Ubuntu 18.04 distribution. Kubernetes components used: Ingress, Helm, Pods, Deployments, Services, Horizontal Pod Autoscaler)

Master Android application to detect morphed passport images. (Development of Android application called 'Demorpher' which takes the user image and compares with a pre-existing morphed image. The resultant would produce the demorphed image with matching accuracy.)

Work Service Virtualization of Banking Services at Techprocess Pvt.Ltd.

Work Scalability and Load Testing at HDFC Bank

## Research Papers

2020 **Android Application for detecting morphed passport images**  
*Otto von Guericke University*  
Demonstrating how a live image of the user face acquired at uncontrolled environment, can be used to restore the de-morphed image from the morphed image stored in the travel document.

2019 **Bio-metric benchmark based on Handwriting and Hand Geometry Modalities**  
*Otto von Guericke University*  
Identification of inter-class and intra-class variance including the impact of forgeries concerning security aspect.

## Awards

2017 Knowledge Transfer session QualityKiosk Technologies  
2016 Student of the Year Datta Meghe College of Engineering  
2015 Second rank Academic Performer Datta Meghe College of Engineering

- ✧ K-means Clustering
- ✧ Linear Regression
- ✧ Logistic Regression

## Publications

- |      |   |
|------|---|
| 2018 | <b>Computer Organization and Architecture</b><br><i>TEK97</i><br>Book on Microprocessor Architecture and Techniques |
| 2018 | <b>Analysis of Algorithms</b><br><i>TEK97</i><br>Book on common data structure algorithms                           |
| 2017 | <b>Structured Programming Approach</b><br><i>TEK97</i><br>Book on Basic C language practices                        |
| 2017 | <b>Operating Systems</b><br><i>TEK97</i><br>Book on internals of OS   |

## Certifications

- |      |   |                        |
|------|---|------------------------|
| 2020 | <b>Time Series Analysis with R</b><br>Basics of time series analytics, Approaches used for Time Series forecasting, Decomposition Method, Irregularity in decomposition, Model Forecast theory, Exponential Smoothing function. | Great Learning Academy |
| 2020 | <b>Introduction to R Programming</b><br>Basics of tibble, vectors, matrices, ggplot2, and other data visualizations.  | Udemy                  |
| 2019 | <b>Introduction to Python Programming</b><br>Writing code using PEP8 standard, Basics of python data types and data structures, NumPy, Pandas, Matplotlib, Seaborn, Object-oriented concepts in Python.                         | MySirG.com             |