



## Ranji Raj Nair

- ▶ DOB: 18.11.1994
- ▶ Nationality: Indian
- ▶ Marital status: Unmarried

## Skills

**Python** 4+ yrs.



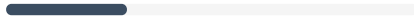
**R** 1+ yrs.



**SQL** 1+ yrs.



**Data science** 2+ yrs.



**German** A1



**English** C1



## Biography

Identifying improved approaches and enhanced solutions to business challenges are activities that drive and inspire me. I believe that fresh perspectives and trying new techniques help understand the Data Science field evolve and grow. I have confidence in my ability to facilitate positive change, distill insights from complex data and collective effort and I would love to explore more and to be part of the team I am into with strong analytical, leadership and cross-functional collaboration skills.

## Work Experience

### Junior Data Scientist

07/2016 - 04/2018

Department of Center of Excellence  
QualityKiosk Technologies Pvt. Ltd., Navi Mumbai,  
India

#### Housing Development Finance Corporation (HDFC) bank for Machine Learning/AI explainability with CRMNext solutions.

On-premise client location including different stakeholders such as performance testing, application monitoring, to identify the key performance indicators (KPIs) for adding business value for the CRM application.

Key responsibilities: Perform system administration, documentation and application testing, text normalization and processing, writing NLP parsers, and spell checkers.

Duration: 6 months

#### Infrastructure Development Finance Company (IDFC) bank with MLOps and cloud service virtualization.

12/2016 - 03/2017

Location: On-premise

Duration: 3-4 months

Key responsibilities: Build and construct prototypes based on ML models, proof of concepts and present to the client, interfacing of the third-party cloud service 'Parasoft CE' for service virtualization and testing.

#### Tata Motors in vehicle industry for predictive maintenance.

04/2017 - 06/2017

Location: On-premise

Duration: 2 months

Key responsibilities: Build and construct prototypes based on ML models, proof of concepts and present to the client, interfacing of the third-party cloud service 'Parasoft CE' for service virtualization and testing.

#### Techprocess Payment services (Ingenico group) for payment flow metrics determination

12/2017 - 04/2018

Location: On-premise

Duration: 6 months

Generating use case and testing ML models for fraud detection for preventing transaction loss to merchants and payment optimization in areas like billing, conversion, payouts and connectivity.

Key responsibilities: Present results in an intuitive, actionable manner that can be understood by all sponsor audiences and stakeholders, implementation of a middleware to check for payment optimization with security to the workflow. Support projects throughout their life-cycle, including conceptualization, requirements definition, data procurement, development, integration, and socialization.

## Education

2019 - current

### Data & Knowledge Engineering (M.Sc.)

Otto von Guericke University,  
Magdeburg, Germany

Computer Science • Data Science

2012 - 2016

### Information Technology (B.E.)

University of Mumbai

STEM • Data Science

2000 - 2012

### High school & Jr. College

SIO's Vani Vidyalaya

## Interests

- ▶ Teaching
- ▶ Mentoring
- ▶ Fitness
- ▶ Cooking
- ▶ Travel

## Contact

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🐙 GitHub

in LinkedIn

📺 YouTube Channel

## Projects

- Implementation of ML algorithms (Linear regression, Neural Networks, Naive Bayes) from scratch designed to work on masked data sets without using external libraries (View)
- **Chatbot implementation** - A small domestic chatbot as part of programming assignment which does document classification and filtering and returns the response text (IDE: Spyder, Libraries: NLTK, sklearn) (View)
- **Global Pandemic Predictor** - a simple linear regression machine learning model for predicting the total cases of pandemic from OWID dataset. Built using Python libraries (Pandas, NumPy, Statsmodels, Pickle, Matplotlib, Seaborn). Model is further represented as a Flask Web Application with a backend database connectivity to SQLite3 using SQLAlchemy. Later deployed to Heroku PaaS on Cloud Platform (Webserver used: Waitress, Version control: git bash). As an alternative also Dockerized this application to decommission the need of storing onto local setup or virtual environment (View)
- **emojivoto** - 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) (View)
- **\*Scientific team project:** 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.)

## Publications & Research Papers

- Ranjiraj Rajendran Nair & Darshit Paresh Shah & Nikhilkumar Italiya & Endi Haxhiraj (2020). "Android Application for detecting morphed passport images". In: *WTP IT Security*, Otto von Guericke University, August 28-08, 2020. (Read)
- Ranjiraj Rajendran Nair & Darshit Paresh Shah (2019). "*Bio-metric benchmark based on handwriting and hand geometry Modalities*". Otto von Guericke University, January 22-01, 2019. (Read)
- Ranjiraj Rajendran Nair (2018). "Analysis of Algorithms". In: *Essential Data structure algorithms for computer scientists*, University of Mumbai, October 12-10, 2018. (View)
- Ranjiraj Rajendran Nair (2017). "C language Basics". In: *The Structured Programming Approach*, University of Mumbai, July 09-07, 2017. (View)

Magdeburg, 23rd March 2021

Ranjiraj Rajendran Nair