Dr.rer.nat
Joseph Njeri
Curriculum Vitae

Personal Details

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E-mail	nkarianjahi@gmail.com
Nationality	Kenya
Date of Birth	14.06.1985
Home Page	`https://karianjahi.github.io/personal-portfolio`

Executive Summary

Experienced Data Scientist and Educator with a PhD in Meteorology and a strong track record in machine learning, Python development, and data coaching. Skilled in Django, Flask, PostgreSQL, model deployment with intermediate Frontend skills. Passionate about applying data-driven solutions and mentoring future data professionals.

Work Experience

2021/11 - Current   **Mid-Level Data Science Coach**, *Spiced/Neuefische GmbH*, Berlin, Germany

Curriculum Highlights:
- Setup of Unix machines and Git environments
- Data preparation using Pandas and PostgreSQL
- Visualizations
- Exploratory data analysis and data cleaning
- Regression methods, bias-variance trade-offs, and regularization
- Decision trees (Random Forests)
- Ensemble models
- Time series analysis
- Clustering and dimensionality reduction
- Natural Language Processing (NLP)
- Databases and data engineering pipelines

2019/07 - 2021/06   **Data Scientist**, *Engineering Data Intelligence (EDI GmbH)*, Karlsruhe, Germany

Responsibilities
- Built machine learning models to analyze and improve complex relationships between multiple variables
- Developed a web-based app for clustering and cause-effect analysis using Scikit-learn and Django
- Wrote backend tests to ensure reliability and performance of data-driven applications
- Created automated UI tests with Selenium for end-to-end functionality
- Wrote technical documentation, including Software Requirements Specifications (SRS)

2016/05 - 2019/06	**Research Associate**, *Karlsruhe Institute of Technology*, Karlsruhe, Germany

Responsibilities
- Managed climate data for the Karlsruhe African Surface Station Database (KASSD)
- Prepared data reports and conducted data analyses
- Supported research projects with accurate and timely data handling

2014/12 - 2015/06	**Lecturer of Environmental Sciences**, *University of Eldoret)*, Eldoret, Kenya
2013/01 - 2014/11	**Lecturer of Meteorology**, *South Eastern Kenya University)*, Kitui, Kenya

Education and Training

06/2021 - 09/2021	**Data Science and Machine Learning Bootcamp**, *Spiced Academy GmbH*, Berlin, Germany

- **Python Programming:** Data types, control flow, functions, error handling
- **Data Analysis:** Pandas, NumPy, data wrangling, cleaning
- **Visualization:** Matplotlib, Seaborn, storytelling with data
- **Machine Learning:** Scikit-learn, regression, classification, unsupervised learning, Time Series, Markov Chains
- **Deep Learning:** Neural Networks, CNNs with Keras & TensorFlow
- **PostgreSQL:** Querying, filtering, joins and complex queries
- **Data Pipelines:** API's, Docker, MongoDB, Extract-Transform-Load (ETL)
- **Software engineering:** Automated testing, Continuous Integration, building python packages code profiling, model deployment using Flask, version control using Git and GitHub
- **Project:** Object detection – Traffic lights detection using a Convolutional Neural Network (YOLO)

2015/10–2019/05	**Doctor of Natural Sciences - Meteorology**, *Karlsruhe Institute of Technology*, Karlsruhe, Germany

- **Project:** Synoptic-scale dynamics and modeling of extreme precipitation events in Kenya

2010/10-2012/08	**Master of Science - Meteorology**, *University of Nairobi*, Nairobi, Kenya

- **Project:** Convection indices for rainfall predictability over East Africa

2005/10–2009/09	**BSc. (Meteorology)**, *University of Nairobi*, Nairobi, *Kenya*

Project title: Changes in rainfall patterns in the regions surrounding the main dams in Kenya.

Honors and Awards

2015	**DAAD Scholarship**, *Bonn, Germany*

Awarded for PhD studies at Karlsruhe Institute of Technology

2010	**DAAD Scholarship**, *Bonn, Germany*

Awarded for Master's thesis at University of Nairobi

Skills and Interests

Languages

English	Level C2	
German	Level B1	**InterDaf Zertifikat B1**
Swahili	Level C2	

Software Skills

Programming Languages	Python (Pandas, Scikit-learn, Keras, Flask, Django), SQL, Bash

Data Science & Machine Learning	Regression, Decision Trees, Random Forests, Ensemble Methods, Time Series Analysis, Clustering, Dimensionality Reduction, NLP, Computer Vision (YOLO)
Databases	PostgreSQL, MongoDB
Tools & Frameworks	Git, Docker, Selenium, Matplotlib, Seaborn, Google Maps API, NCL
Operating Systems	Linux/Unix, Windows (MS Office)
Web Development	Flask, Django, REST APIs
Testing	Backend software testing, UI testing with Selenium
Other	Data visualization, Exploratory data analysis, Software Requirements Specification (SRS)

Selected GitHub Projects

2019 - to date

A list of some of my selected github can be accessed here: `https://github.com/karianjahi/selected-github-projects`

Additional Information

Mobility   Driver's License class B