Personal Information

Date of birth:	5th Jan, 1984
Place of birth:	Kaboshia, Sudan
Nationality:	Sudanese
Marital Status:	Single
Gender:	Female
Languages:	Arabic (fluent), English (level C1), German (leve B1)

Contact Information

Karlsruhe Institute of Technology (KIT)
Institute of Meteorology and Climate Research
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Qualifications

- PhD student at IMK-TRO since October, 2018, KIT, Karlsruhe, Germany.
  Thesis title: *How does the vertical structure of the tropical atmosphere determine the response of tropical rain belts to global warming?*

- Master degree in Atmospheric Science, Oceanography and Climate, September 2016, Stockholm University, Sweden.
  Thesis title: *Analysis of Sahelian Sudan Rainfall Spells and its Link to Large Scale Flow*

- Postgraduate Diploma in Earth System Physics, August 2012, ICTP, Trieste, Italy.
  Thesis title: *Meridional Heat Transport in Present and Future Climate*

- Postgraduate Diploma in Physics, May 2009, college of Graduate Studies, Sudan University of Science and Technology (SUST), Khartoum, Sudan.
  Thesis title: *Comparison Study between Ultrasonic Testing and Magnetic Particle Inspection Technology*

- Bachelor of Education, first class honor in Physics, Feb 2007, SUST, Khartoum, Sudan.
  Thesis title: *Medical Applications of X-Ray*

Academic Experience

- *Teaching Assistant for Tropical Meteorology Course*   **Winter Semester, 2020/2019**
  for master degree students at KIT

- *Teaching Assistant for Python Crash Course*   **Winter Semester, 2020/2019**
  for master degree students at KIT

- *Lecturer at SUST*   **Sep, 2012 - June, 2018**
  Duties included teaching various undergraduate level physics courses, responsibilities included exams, homework assignments, grads, and supervising finale year students projects at College of Education, SUST, Khartoum, Sudan. During this period I supervised the following undergraduate student projects:
  - *Rainfall climatology in Sudan and its effect on agricultural corps* , 2014.
  - *The study of solar radiation within the tropics and its effect on Sudan climate temperatures*, 2014.
  - *The usage of reflective and refractive seismic waves to study earth interior structure*, 2013.
  - *Seismic treatments using Fourier Transform*, 2013.

- *Teaching Assistant at SUST*   **Feb, 2009 - Sep, 2010**
  Duties included revising, solving homework assignments and old exams.

- *Part Time Research Scientist at Africa City of Technology (ACT)*   **Sep, 2016 - June, 2018**

- *Research Assistant at ACT*   **Nov, 2008 - Aug, 2009**

Administrative Experience

Head of Physics Section at Science Department   **Sep, 2012 - Sep, 2014**
College of Education, SUST, Sudan

Member of

Doctoral Researchers Convention of Physics Faculty, KIT, Karlsruhe, Germany.   **since Feb, 2019**
Scientific Association of SUST, Khartoum, Sudan.   **since 2006**

Workshops

- Centre of Interdisciplinary Mathematics (CIM) workshop titled: "Deep Neural Networks for Beginners", Uppsala, Sweden, 14-16 October, 2019.

- WCRP Grand Challenge on Clouds, Circulation and Climate Sensitivity: 2nd Meeting on Monsoons and Tropical Rain Belt, Trieste, Italy, July, 2018.

- Workshop under title Targeted Training Activity: El Nino Southern Oscillation Monsoon in the Current and Future Climate, Trieste, Italy, July, 2012.

- Workshop under title Laboratory Work Promotion at ACT, Khartoum, Sudan, 2008.

- Workshop on Laboratory Work Promotion, A Central Committee for Laboratory Instruments and Equipments, SUST. Khartoum, Sudan, 2008.

Summer Schools

- Earth System Modelling Summer School (EaSyMS20), Hamburg, Germany, 16–20 September 2019.

- ICTP Summer School on Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Multiple Equilibria in the Climate System, Trieste, Italy, June, 2018.

Training Courses

- Introductory, intermediate and advanced courses: "High Performance Computing (HPC) in Baden-Württemberg", KIT, Karlsruhe, Germany, 9-11 October 2018.

- Climate Modeling and Dynamics with ICON course, KIT, Karlsruhe, Germany, Winter Semester, 2018/2019

- Training courses in Ultrasonic, Magnetic Particle and Liquid Penetrant Testing, NDT Level II, NDT Unit, SUDAPET Petroleum Technical Center (PTC), Khartoum, Sudan, February, 2009.

- Course in Fundamental of Excellence Models, Quality Centre, SUST. Khartoum, Sudan, December, 2008.

- Teaching Practice at Halowat Sa'ad Al Namuthagia High School, Khartoum, Sudan, December-February, 2007.

Computer Skills

- Python, Bash, CDO and ICON model.

- Operating Systems: Linux, Windows.

References

- Prof. Dr. Peter Knippertz
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- Dr. Aiko Voigt
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