Dr. Tworit Dash

10 July 1994
tworitdash@gmail.com

Skill-set

Research: Electromagnetics Theory, Radar Signal Processing, Analytical Problem Solving, Research Communication, Business Communication, Collaboration, Project Management, Technical Writing, Multilingual
Programming: Matlab, Python, Ruby
Simulation Env: CST Studio, FEKO

OS: macOS, Windows, FreeBSD, Linux (Debian, Fedora, OpenSUSE, Ubuntu, Raspbian)

Extra-Curricular

Speaker at Ruby conferences
- I spoke about IoT on several ruby conferences like Eurucamp 2014 (Germany), Euruko 2015 (Austria) and Deccan Ruby Conference (India)

Senior Manager @ Zairza
- Zairza is the technical club of College of Engineering and Technology, Bhubaneswar.

Hobbies: Sketching, Blogging, Cooking, Cycling.

Profile

Researcher: Electrical Engineer — Delft University of Technology
Expertise in Atmospheric Remote Sensing and Electromagnetic Theory.

Work Experience

Aug'16-Aug'18: Calibration Engineer — RBEI, Bangalore
At Bosch, I worked as an OBD Calibration Engineer for passenger cars for Indian *Original Equipment Manufacturers*.

Education

Sep'20-Feb'25: Doctor of Philosophy — Delft University of Technology
Thesis: "On Doppler Processing for Fast Scanning Weather Radars". Key Publications:

[1] *T. Dash, H. Driessen, O. Krasnov, and A. Yarovoy, "Doppler Spectrum Parameter Estimation for Weather Radar Echoes Using a Parametric Semi-analytical Model," IEEE Trans. Geosci. Remote Sens., vol. 62, pp. 1-18, 2024, doi: 10.1109/TGRS.2023.3338233.*
[2] *T. Dash, H. Driessen, O. A. Krasnov, and A. Yarovoy, "Counter-Aliasing Is Better Than De-Aliasing: Application to Doppler Weather Radar With Aperiodic Pulse Train," IEEE Trans. Geosci. Remote Sens., vol. 62, pp. 1-17, 2024, doi: 10.1109/TGRS.2024.3438567.*

Sep'18-Aug'20: Master of Science — Delft University of Technology
Thesis: "Computationally Efficient Conical Horn Antenna Design, a theoretical design approach ". Key publications:

[3] *T. Dash, "Computationally Efficient Conical Horn Antenna Design," Delft University of Technology, Tech. Rep., 2020. [Online]. Available: http://resolver.tudelft.nl/uuid:190e87c7-9309-470f-a821-43b7c3b8867b*
[4] *T. K. Dash, D. Prinsloo, and A. Yarovoy, "Radiation from the Open-ended Over-moded Cylindrical Waveguide," 2024, doi: 10.46620/URSIATRASC24/QEUT4611.*

Aug'12-May'16: Bachelor of Technology — College of Engineering and Technology, Bhubaneswar

Electronics and Instrumentation, C-GPA: 8.94/10.

Achievements

Aug'2020 — *cum laude* — Master of Science
Graduated *cum laude* from master program in Telecommunication and Sensing systems and master thesis at The Netherlands Institute for Radio Astronomy (ASTRON) and TU Delft.

Feb'2016 — Merit Award — Bachelor of Technology
Alumni merit award for best final year undergraduate student.

Languages

Odia (Native), English (Native/ Bilingual), Hindi (Professional), Sanskrit (Beginner).