



## DWI CAHYONO

High Frequency, Radar, Embedded System, Wireless Communication Technology, and IoT enthusiast

### CONTACT

Address: Elisabeth-Selbert-Str.13, 45473

Muelheim a/d Ruhr

Nationality: Indonesia

### PERSONAL

Birthdate, place: 20.11.1990 in Surabaya, Indonesia

Phone: +49 15255632337

E-Mail: [cahyo.dc@gmail.com](mailto:cahyo.dc@gmail.com) / [dwi.cahyono@stud.uni-due.de](mailto:dwi.cahyono@stud.uni-due.de)

Muelheim an der Ruhr, 03.05.2018

*Dwi Cahyono*

## WORK EXPERIENCES

03/2017 –  
now

### Research Assistant

Digital Signal Processing Institute, Uni Duisburg-Essen

- Signal Processing
- Wideband Channel Measurement

09/2016-  
11/2016

### Lab. Analyzer (*Studentische Aushilfe*)

Lyondell Basell, Wesseling.

- Gather gas sample
- Analyze gas sample

01/2011-  
02/2013

### Coord. of Research Assistant

Telkom University, Indonesia

- Nanosatellite Project of IINUSAT-1, S-Band Ground Station

## EDUCATIONS

10/2013-  
08/2018

### Master of Science in Embedded System Engineering

Universität Duisburg-Essen, Germany

- Internet of Things
- Wireless Communication Technology

08/2009-  
02/2013

### Bachelor of Electrical Telecommunication Engineering

Institut Teknologi Telkom (Telkom University), Bandung Indonesia

## INTERNSHIPS AND SEMINARS

07/2017

### Workshop & Course

CST Studio Suite simulation at RF-Days, Bochum

07/2017

### Workshop

Measurement from Rohde & Schwarz at RF Days, Bochum

07/2017

### Workshop

Empire XPU theory and simulation, IMST GmbH at RF Days, Bochum

08/2015

### Summer Workshop

CubeSat (Small Satellite) Developer Workshop 2015, Utah State University, Logan, USA.

10/2014

### International Internship

Synthetic Aperture Radar (SAR) Satellite, focussing on SAR Image Interpretation. SOKENDAI, Japan Aerospace and Exploration Center (JAXA), Tokyo, Japan

06/2013 **International seminar and Conference**  
 Space Technology (Recent Advance in Space Technology), Istanbul, Turkey, 2013. Used tools: Matlab, Xilinx, Altera, FPGA board, raw camera, Altium, PCB board fabrication.

02/2013 **Asian Winter School**  
 Sekondai Campus and JAXA (Japan Aerospace and Exploration Center), Sagamihara, Kanagawa, Japan

for Nanosatellite FPGA Based". Paper publication: ITS conference 2012, Bangkok, Thailand

## SELECTED PROJECTS

03/2018 **Master Thesis**  
 "Impact of Antenna Directivities on the Multipath THz Channel". Key topics: THz channel model, 350 GHz Horn (and lens) and phased array antenna design, Antenna misalignment with Gaussian Antenna channel model, Hybrid beamforming for THz channel. Used tools: Matlab, CST Microwave Studio.

02/2017- **Tera50+ project**  
 mm-Wave for communication (channel measurement), Duisburg. Used tools: Matlab, CST Microwave Studio, measurement Tools (VNA, DSA, Oscilloscope, etc).

04/2017- **Student Project**  
 06/2017 *Self-Organizing Embedded System*  
 Middleware project for IoT Application. Used tools: Photon particle board, Raspberry Pi, C, Cloud service

01/2009- **Spacecraft Nanosatellite project**  
 02/2013 Remote Sensing Payload on Nanosatellite liNUSAT-1, INSPIRE Indonesia. Used tools : Matlab, Xilinx, Altera, Althium, PCB board fabrication.

01/2011 **Ground Station Nanosatellite project**  
 The S-Band Ground Station Rotator Controller for Remote Sensing Nanosatellite liNUSAT-1. (paper publication: Surabaya, Indonesia). Used tools: Matlab, C, microcontroller board.

08/2012 **Bachelor Thesis**  
 "Design and Realization OBDH of Remote Sensing Payload

## PERSONAL SKILLS

### Computer Skills

Programming	Matlab, VHDL, C, Latex	
OS	Windows, Linux	
Design	Corel Draw, CST Microwave Studio, Altium Designer	
Web	Wordpress, HTML, CSS	
Data bank	MySQL	
Technology development	Raspberry Pi, Arduino, Microsoft Azure, 6LoWPAN	

### Technology Skills

Wireless Communication	Antenna Design, Channel Model, Digital and Analog Signal Processing, Satellite, EM Measurement System	
Embedded System	FPGA, ARM, Middleware, Internet of Things, Computer & Parallel Architecture, Cloud Computing	

### Language Skills

Indonesian (Native)	
English (Advance)	
German (B2 level)	

## Interests and Hobbies

New technologies, Mobile Communication, IoT, Sport (Football, Badminton), Travelling, Painting.