

CURRICULUM VITAE

1. Full name and date

- Faris, Muhammad
- Male
- 20 October 2019

2. Date and place of birth, nationality, current residence

- 09 October 1991, Yogyakarta
- Indonesian
- Yogyakarta, Indonesia. Email: mfaris@ugm.ac.id

3. Education and degrees awarded

- M.Sc., Delft University of Technology – The Netherlands, Systems and Control, 2018
- S.T. (equal to B.Eng.), Universitas Gadjah Mada – Indonesia, Electrical Engineering, *Honors: Cum Laude* (GPA: 3.58/4.00), 2014

4. Other education and training, qualifications and skills

- Computers skills: MATLAB (advance), Latex (advance), C/C++ (intermediate), Arduino (intermediate), LabView (basic), Python (basic), Machine learning with Tensorflow (basic)
- English Integrated Program Course (Grammar – Listening – Speaking), 2010

5. Linguistic skills

- Mother tongue: Indonesian
- During M.Sc. study in Delft University of Technology, The Netherlands, English is the only language that is used as the instruction language, 08/2015 – 01/2018
- IELTS Test Score: 6.5 (Scale: 0 – 9), 02/2015

6. Current position

- Full-time Junior Lecturer, Department of Electrical and Information Engineering (DEIE), Universitas Gadjah Mada (UGM), Indonesia, 2018 – now;
Description: I am appointed as a junior lecturer with a specialization in control systems engineering. My first tasks include teaching, laboratory setup for students training and formulating capstone project guide for bachelor students.
- Research career phase: First stage researcher (looking for a doctoral opportunity)

7. Previous work experience

- Part-time visiting lecturer, Department of Electrical Engineering Education, Yogyakarta State University, Indonesia, 08/2018 – 01/2019
- Part-time research assistant, Control and Instrumentation laboratory, DEIE, UGM, Indonesia, 03/2018 – 10/2018
- Research and development engineer, National electric vehicle research group, UGM, Indonesia, 02/2015 – 08/2015
- Part-time technical crew, PT. Atnic Ekotekno Wicaksana (JalaTech), Indonesia, 02/2014 – 08/2015
- Laboratory assistant – Control and Instrumentation lab work, Control and Instrumentation Laboratory, DEIE, UGM, Indonesia, 2014

- Laboratory assistant – Fundamental of Electronics lab work, Basic Electronics Laboratory, DEIE, UGM, Indonesia, 2014

8. Research funding as well as leadership and supervision

- UAV Quadrotor Formation Control Joint Research Project between DEIE UGM and Tokai University Japan: Japan International Cooperation Agency (JICA), 2014 – 2015
- Supervision of two undergraduate students, *topic: design and implementation of control systems on humanoid robots*, 08/2019 – now

9. Merits in teaching and pedagogical competence (if required, complement by submitting a teaching portfolio)

- Basic training and workshop on university and academia working environment for junior lecturers, Universitas Gadjah Mada, 2019
- Training and workshop for innovative teaching and e-learning, Universitas Gadjah Mada, 2019

10. Awards, prizes and honours

- Indonesia Endowment Fund (LPDP) master degree scholarship; A highly competitive scholarship given to selected candidates with excellent academic records and good soft skills, 2015 -2017
- Outstanding Student Scholarship; A scholarship given annually as a reward for students with national and/or international-level achievement, Department of Electrical and Information Engineering, UGM, 2013 - 2014
- Bronze Medal Winner of National Scientific Competition for Students (PIMNAS), 2014
- 3rd Place Winner of International Robot Contest (IRC), South Korea; held by Korean Ministry of Knowledge Economy, 2013
- 1st Place, Indonesian Soccer Robot Contest Regional III; held by Indonesian Directorate General of Higher Education (DIKTI), 2013
- Best Design Robot Indonesian Soccer Robot Contest Regional III, 2013
- 4th Place, Indonesian Intelligent Robot Contest (Robosoccer Humanoid League Division) National Level, 2012
- 1st Place, Indonesian Intelligent Robot Contest (Robosoccer Humanoid League Division) Regional III, 2012

11. Other academic merits

Reviewer for journal articles and conference proceedings:

- International Journal of Information Technology and Electrical Engineering (IJITEE), 2019 – now
- National Journal of Electrical Engineering and Information Technology (JNTETI), 2018 – now
- National Conference on Information Technology and Electrical Engineering (CITEE), 2019
- 10th International Conference on Information Technology and Electrical Engineering (ICITEE), 2018

Commitee:

- National Conference on Information Technology and Electrical Engineering (CITEE), 2019
- 6th International Conference on Information Technology and Electrical Engineering (ICITEE), 2014

12. Scientific and societal impact of research

- Total number of publications: 11, number of citations: 41, h-index: 2, i-10 index: 2
- List of publications (2013 – 2019):

Refereed journal articles:

1. Hadha Afrisal, Munadi, Muhammad Faris, Bakhtiar Alldino A.S., *Pengembangan Robot Humanoid Pemain Bola Otonom (Development of Autonomous Robosoccer Humanoid Robots)*, Diponegoro University Engineering Journal (TEKNIK), 2019.
2. Muhammad Faris, and Ircham, *Penjadwalan Pemeliharaan Rel Kereta dengan Metode Distributed Model Predictive Control (Maintenance Scheduling of Railway Tracks with Distributed Model Predictive Control)*, National Journal of Electrical Engineering and Information Technology (JNTETI), May 2019.

Refereed conference proceedings:

1. Almido Haryanto Ginting, Oyas Wahyunggoro, Adha Imam Cahyadi, Muhammad Faris, *Stabilization Of Quadrotor on $SO(3)$ With Robust Proportional-Derivative to Compensate CoG*, 11th IEEE International Conference on Information Technology and Electrical Engineering (ICITEE), Pattaya, Thailand, 2019 (to appear).
2. Fahim Djatmiko, Ridi Ferdiana, Muhammad Faris, *A Review of Sentiment Analysis for Non-English Language*, IEEE International Conference of Artificial Intelligence and Information Technology (ICAIIIT), Yogyakarta, Indonesia, 2019.
3. Muhammad Faris, Alfredo Núñez, Zhou Su, and Bart De Schutter, *Distributed Optimization for Railway Track Maintenance Operations Planning*, 21th IEEE International Conference on Intelligent Transportation Systems (IEEE ITSC), Maui, Hawaii, USA, 2018.
4. Nia Maharani Raharja, Iswanto, Muhammad Faris, Adha Imam Cahyadi, *Hover Position Quadrotor Control with Fuzzy Logic*, IEEE International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE), Semarang, Indonesia, 2014.
5. Muhammad Faris, Adha Imam Cahyadi, Hanung Adi Nugroho, *Data Fusion and Switching Function for MAV Navigation System*, IEEE International Conference on Electrical Engineering and Computer Science (ICEECS), Bali, Indonesia, 2014.
6. Hadha Afrisal, Muhammad Faris, Guntur Utomo P., Lafiona Grezelda, Indah Soesanti, Mochammad Andri F., *Portable Smart Sorting and Grading Machine for Fruits using Computer Vision*, IEEE International Conference on Computer, Control, Informatics, and Its Application (IC3INA), Jakarta, Indonesia, 2013.
7. Muhammad Faris, *Studi Kestabilan Sistem Dinamik dalam Skema Networked Control Systems: dengan Kasus Waktu Tunda dan Data Hilang*, National Conference on Information Technology and Electrical Engineering (CITEE), Yogyakarta, Indonesia, 2019.
8. Muhammad Faris, Muhammad Abdurrohman, Ahmad Ataka Awwalur Rizqi, Dyah Anggun Sartika, Adha Imam Cahyadi, *A Combination Algorithm of Image Mosaicing with Distortion Removal Based on SURF*, Regional Conference on Computer and Information Engineering (RC-CIE), Yogyakarta, Indonesia, 2014.

Non-refereed conference proceedings:

1. Faris, M., Izzulmakin, M. R., Ashari, M. F., Prasetya, G. U., Wildana, F. A., Purnama, D., Sulistiyo, R., Rahman, R. N., Luknanto, B. K., Firdaus, M. A., Sumbodo, B. A. A., Candradewi, I., *Alfarobi Kidsize Humanoid Robot*, Indonesian Symposium on Robot Soccer Competition (ISRSC), Semarang, Indonesia, 2013.

Thesis (bachelor and master):

1. Master thesis: *Distributed Optimization for Railway Track Maintenance Operations Planning*, supervisors: Prof. Dr. Ir. Bart De Schutter, Dr. Alfredo Núñez, and Dr. Zhou Su, 2018
2. Bachelor thesis: *Data Fusion and Switching Function for UAV Quadrotor Navigation System*, supervisors: Dr. Eng. Adha Imam Cahyadi and Hanung Adi Nugroho, Ph.D, 2014

13. Positions of trust in society and other societal merits

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14. Other merits

- Participant of mini-grant project of Student Creativity Programme (PKM): UAV Quadrotor Coordination and Formation Control System for Optimizing Disaster Mitigation, Indonesian Directorate General of Higher Education (DIKTI), 2014
- Participant of mini-grant project of Student Creativity Programme (PKM): Portable Smart Sorting and Grading Machine for Fruits using Computer Vision. Indonesian Directorate General of Higher Education (DIKTI), 2013
- Programmer and team leader at Gadjah Mada Robotic Team (GMRT): UGM Humanoid Soccer Robot Research and Development (Alfarobi), UGM, 2011 – 2013

15. Referees:

- **Prof. Dr. Ir. Bart De Schutter**
Full Professor and Head of Department
Hybrid, Adaptive & Nonlinear Systems Group
Delft Center for Systems and Control (DCSC), Faculty of Mechanical, Maritime, and Materials Engineering (3mE), Delft University of Technology (TU Delft), The Netherlands
Email: b.deschutter@tudelft.nl
Relationship: MSc Thesis Main Supervisor
- **Dr. Alfredo Núñez**
Assistant Professor
Data-Based Maintenance for Railway Infrastructure
Section of Railway Engineering, Faculty of Civil Engineering and Geosciences (CEG)
Delft University of Technology (TU Delft), The Netherlands
Email: a.a.nunezvencio@tudelft.nl
Relationship: MSc Thesis Co-(daily) Supervisor

- **Dr. Eng. Adha Imam Cahyadi**
Assistant Professor and Head of Electrical Engineering Bachelor Program
System of Instrumentation, Control, Automation, and Robotics (SICAR) Research Group
Department of Electrical and Information Engineering (DEIE), Faculty of Engineering,
Universitas Gadjah Mada (UGM), Indonesia
Email: adha.imam@ugm.ac.id
Relationship: Bachelor Final Project Main Supervisor
- **Hanung Adi Nugroho, Ph.D.**
Associate Professor and Vice-Head of Department
Intelligent Systems Research Group
Department of Electrical and Information Engineering (DEIE), Faculty of Engineering,
Universitas Gadjah Mada (UGM), Indonesia
Email: adinugroho@ugm.ac.id
Relationship: Bachelor Final Project Co-Supervisor