Yurid Eka Nugraha

yurid@its.ac.idyurid.e@yahoo.com Assistant Professor Institut Teknologi Sepuluh Nopember Department of Electrical Engineering

Employment

Assistant Professor, Dept. of Electrical Engineering,

Institut Teknologi Sepuluh Nopember (ITS) (Jul. 2025-now)

Junior Lecturer, Dept. of Electrical Engineering,

Institut Teknologi Sepuluh Nopember (ITS) (Feb. 2023-Jun. 2025)

Education

Ph.D. in Systems and Control Engineering, Tokyo Institute of Technology,

Apr. 2020 - Dec. 2022, GPA: 4.05/4.50 (equivalent to 95.5/100)

Thesis: Consensus and clustering of dynamic resilient multiagent systems under repeated games

Advisor: Tomohisa Hayakawa

M.Eng. in Systems and Control Engineering, Tokyo Institute of Technology,

Apr. 2018 - Apr. 2020, GPA: 3.50/4.50 (equivalent to 90/100)

Thesis: Two-player dynamic resilient graph games for jamming attacks

and recoveries analysis on multi-agent systems

Advisor: Tomohisa Hayakawa

Research student, Systems and Control engineering, Tokyo Institute of Technology, Apr. 2017 - Mar. 2018

B.Eng. in Electrical Engineering (Control System Engineering subfield),

Institut Teknologi Sepuluh Nopember,

Aug. 2012 - Mar. 2016, GPA: 3.71/4.00 (cum laude)

Thesis: Waypoint tracking control of quadcopter Using PID-sliding mode control

Advisor: Rusdhianto Effendi, Eka Iskandar

Research Interest

- Cross between game theory and multiagent systems
- Security of cyberphysical systems
- Nonlinear control systems
- Networked control systems
- Control theory

Awards and

PPA Scholarship, by Indonesian Government, 2013-2016

Fellowships

Monbukagakusho Scholarship, by Japanese Government, 2017-2022

SICE International Young Authors Award, by Society of Instrument and Control Engineers (SICE), 2020

Selected Journal Publication List

- 1. Y. Nugraha, A. Cetinkaya, T. Hayakawa, H. Ishii, and Q. Zhu, "Rolling horizon games of resilient networks with non-uniform horizons", *European Journal of Control*, pp. 100693, 2022.
- 2. ——, "Dynamic resilient network games with applications to multiagent consensus", *IEEE Trans. Contr. Netw. Systems*, vol. 8, pp. 246-259, 2021.

Selected Conference Publication List

- 1. Y. Nugraha, A. Cetinkaya, T. Hayakawa, H. Ishii, and Q. Zhu, "Two-Player incomplete games of resilient multiagent systems", in Proc. IFAC World Congress, 2023, to appear.
- 2. ——, "Rolling horizon games of resilient networks with non-uniform horizons", in *Proc. European Control Conf.*, 2022, pp. 1254-1269 (also appeared as a journal in EJC).
- 3. ——, "Rolling horizon games for cluster formation of resilient multiagent systems", in *Proc. IEEE Conf. Decision and Control*, 2021, pp. 4829-4934.
- 4. ——, "Cluster formation in multiagent consensus via dynamic resilient graph games", in *Proc. IEEE Conf. on Control Technology and Applications*, 2021, pp. 735-740.
- 5. ——, "Dynamic resilient network games considering connectivity", in *Proc. IEEE Conf. Decision and Control*, 2020, pp. 3779-3784.
- 6. ——, "Dynamic resilient graph games for state-dependent jamming attacks analysis on multi-agent systems", in *Proc. IFAC World Congress*, 2020, pp. 3421–3426.
- 7. ——, "Subgame perfect equilibrium analysis for jamming attacks on resilient graphs", in *Proc. American Control Conf.*, 2019, pp. 2060-2065.

Review and Organizing Experience

Journal: Automatica, IEEE Transactions on Automatic Control, IEEE Transactions on Cybernetics, IEEE Transactions on Control of Network Systems, IEEE Control Systems Letters, IEEE Transactions on Network Science and Engineering.

Conference: IEEE Conference on Decision and Control, American Control Conference, European Control Conference, IFAC World Congress, ISITIA, ICEECIT.

Conference organizer: ISITIA (TPC Chair 2024, TPC Chair 2025).

Society Membership IEEE

IEEE Control Systems Society

IEEE Systems, Man, and Cybernetics Society.