Example Title of Journal Article

Myeongseok Ryu, and Kyunghwan Choi

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***Index Terms*—Example, IEEEtran, journal, LaTeX, template.**

NOTATION

In this study, the following notation is used:

- $\mathbb{R}^n$ denotes the n-dimensional Euclidean space.
- $\mathbb{R}^{n\times m}$ denotes the set of $n \times m$ real matrices.
- $\otimes$ denotes the Kronecker product [1, Chap. 7 Def. 7.1.2].
- A vector and a matrix are denoted by $\boldsymbol{x} = [x_i]_{i\in\{1,\cdots,n\}} \in \mathbb{R}^n$ and $\boldsymbol{A} := [a_{ij}]_{i\in\{1,\cdots,n\},j\in\{1,\cdots,m\}} \in \mathbb{R}^{n\times m}$, respectively.
- $\mathrm{row}_i(\boldsymbol{A})$ denotes the i^{th} row of the matrix $\boldsymbol{A} \in \mathbb{R}^{n\times m}$.
- For $\boldsymbol{A} \in \mathbb{R}^{n\times m}$, denotes the vectorization of $\boldsymbol{A}$, $\mathrm{vec}(\boldsymbol{A}) := (\mathrm{row}_1(\boldsymbol{A}^\top), \cdots, \mathrm{row}_m(\boldsymbol{A}^\top))^\top \in \mathbb{R}^{nm}$.
- $\lambda_{\min}(\boldsymbol{A})$ denotes the minimum eigenvalue of the matrix $\boldsymbol{A} \in \mathbb{R}^{n\times n}$.
- $\boldsymbol{I}_n$ denotes the $n \times n$ identity matrix, and $\boldsymbol{0}_{n\times m}$ denotes the $n \times m$ zero matrix.

I. DUMMY SECTION

You can cite a reference like this [2].

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TABLE I: Example of table.

Symbol	Description	Value
m_1, m_2	Mass	2.465 kg
l_1, l_2	Length	0.2 m
l_{c1}, l_{c2}	Center of mass	0.139 m
I_1, I_2	Inertia	0.069 kgm^2

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II. TABLES AND FIGURES

Refer the following table and figures for examples of tables and figures.

APPENDIX

REFERENCES

[1] D. S. Bernstein, *Matrix Mathematics: Theory, Facts, and Formulas (Second Edition)*. Princeton University Press, 2009. [Online]. Available: http://www.jstor.org/stable/j.ctt7t833

[2] M. Ryu, J. Kim, and K. Choi, "Imposing a weight norm constraint for neuro-adaptive control," Oct. 2024. [Online]. Available: http://dx.doi.org/10.36227/techrxiv.173014412.26480551/v1

(a) My love Spezi.

(b) My love Spezi.

Fig. 1: Example of subfigures. You can add colored lines like [▬] or [▪ ▪ ▪], i.e., you need to use in captions. By the way, the drinks in the figures are Spezi, which is my favorite drink in Munich, Germany.

Myeongseok Ryu received the B.S. degree in mechanical engineering from Incheon National University, South Korea, in 2023, and the M.S. degree in mechanical engineering from Gwangju Institute of Science and Technology (GIST), South Korea, in 2025. He is currently serving as a researcher at the Cho Chun Shik Graduate School of Mobility, Korea Advanced Institute of Science and Technology (KAIST), South Korea. His research interests include adaptive control, neural-networks, and constrained optimization.

Kyunghwan Choi Kyunghwan Choi received his B.S., M.S., and Ph.D. degrees in Mechanical Engineering from KAIST, Daejeon, South Korea, in 2014, 2016, and 2020, respectively. Following his Ph.D., he worked at the Center for Eco-Friendly & Smart Vehicles at KAIST as a Postdoctoral Fellow and later as a Research Assistant Professor. In 2022, he joined GIST as an Assistant Professor in the Department of Mechanical and Robotics Engineering. Currently, he serves as an Assistant Professor at the Cho Chun Shik Graduate School of Mobility at KAIST, where he is also the Director of the Mobility Intelligence and Control Laboratory. His research focuses on optimal and learning-based control for connected, automated, and electrified vehicles (CAEVs).

(a) My love Spezi.

(b) My love Spezi.

Fig. 2: Example of subfigures in full width.