

Title	Fencing and technology
Sub Title	
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Publisher	Faculty of Science and Technology, Keio University
Publication year	2023
Jtitle	New Kyurizukai No.38 (2023. 10)
JaLC DOI	
Abstract	
Notes	Human interface from Keio's Faculty of Science and Technology : bridging humans and computers Yuta Sugiura : associate professor, Department of Information and Computer Science
Genre	Article
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO50001003-00000038-0008

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Fencing and Technology

Yuta Sugiura

As mentioned in the interview, I was a member of the kendo club in junior high school and the fencing club in high school (see page 4). In high school, I competed in the Inter-High School Championships and played against Yuki Ota's team, who went on to win the silver medal at the Beijing Olympics. We ended up losing that match, though... I didn't think much about it at that time, but fencing is a unique sport that was ahead of its time in embracing technological advancements.

This event has a long history and was one of the events conducted at the first Olympic Games. Fencing, as we all know, is a blade-based combat sport with multiple disciplines, and each employs different weapons and

target areas. Fencing used to be the subject of various disputes related to scoring because the blades swing extremely rapidly, and the higher the level of competition, the more difficult it became for the judges to make objective and accurate judgments with the naked eyes.

To solve this problem, an electric scoring apparatus was introduced in the épée events of the 1936 Olympics to accurately determine whether the blade had touched a valid target area. This implementation not only promoted fairness but also led to an explosive increase in the number of competitors. Today, electric scoring is used for a variety of competitions. Technology has become an intermediary between competitors and judges to level the playing field and ultimately make competitions more exciting. Fencing was a pioneer in this area.

It isn't just the technology of fencing that has evolved. The rules of the sport itself have

changed even in the span of time since I quit playing. Before then, many attacks were performed by swinging the blade and having it hit the opponent's back, taking advantage of the sword's suppleness. This technique is very different from swordplay as it was originally intended. Fencing calls for a point to be made when a certain amount of pressure is applied to the tip of the sword, but the criteria for judging the pressure was changed.

As a result, fencing took on a form closer to the original style as performed by knights in historical combat. The aesthetic beauty associated with combat has led to bold rule changes even in competitions with a long history.

This dual aspect of fencing—tradition and modernity—has renewed a sense of fascination of the sport within me, and I still enjoy watching the Olympics and other TV broadcasts when they are held.

理工学 Information

The 24th Annual Science and Technology Exhibition, KEIO TECHNO-MALL 2023

A Place for "Human Companionship" to Create New Collaborations - Chance and Challenge in an Era of Change

After being conducted online in the 2020 and 2021 academic years, the Keio Science and Technology Exhibition KEIO TECHNO-MALL returned last year and was held on-site at the Tokyo International Forum. This year, too, Keio University will present research at the Tokyo International Forum on Friday, December 15, 2023.

In addition to the Undergraduate Faculty and Graduate School of Science and Technology and the School of Medicine, SFC and the Office for Open Innovation's Startup Division are scheduled to participate in AY2023. As with the previous year, we will continue to provide you with information about AI, robot systems, medicine and healthcare, manufacturing, electronics, nanomaterials, the environment and energy, information technology and telecommunication, biotechnology, social infrastructure, foundational science, and Keio-launched ventures.

Around mid-October, an invitation for visitors will be posted on the website shown on the right.



Details: <https://www.kll.keio.ac.jp/ktm/>



Editor's postscript

For the 38th issue of the Kyurizukai, we featured Associate Professor Yuta Sugiura, who is conducting research on "soft interfaces." We hope you also enjoyed having a glimpse of his beautiful wood-adorned lab.

Sugiura emphasizes communication in his research and teaching, and it truly felt that he really likes people and is aiming to solve problems to make our lives better. We hope that through this publication, you can discover how the different topics studied and researched about at the Faculty of Science and Technology is applied in real life and society at large.

(Midori Nakayama)

新版 窮理図解

New Kyurizukai
No. 38 October 2023



Editing: "New Kyurizukai" Editing Committee
Photographer: Keiichiro Muraguchi
Illustrator: Satoshi Nakamura
Designers: Hiroaki Yasojima, Yukihiko Ishikawa (GrID)
Cooperation for editing: Sci-Tech Communications, Inc.
Publisher: Toshiyuki Murakami
Published by : Faculty of Science and Technology, Keio University
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