

Report on NS English Session at 2022 IEICE General Conference – BS-3: Enabling Technologies for Network Systems and Services during the 5G/Beyond 5G Era



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1. Introduction

This article introduces an English Session at the 2022 IEICE General Conference, one of activities of IEICE Technical Committee on Network Systems (NS) [1] regarding promotion of IEICE globalization. Since 2005, in every year's general conference, the technical committee on NS have been continuously organizing the English session in order to offer a good opportunity to make presentations and discussions with overseas researchers, including overseas students. In 2022, in spite of the spread of COVID-19, the 2022 IEICE General Conference [2] was successfully held as an online conference on March 15th-18th, and we have organized the full English symposium session entitled “Enabling Technologies for Network Systems and Services during the 5G/Beyond 5G Era” in the conference.

2. NS English Session

In every NS English Session, we raise a special theme regarding the hot topics of recent Information and Communication Technology (ICT) fields and invite to submit high quality papers. Table 1 shows the recent themes in the English Session. As shown in the table, in 2022, especially interested in the enabling technologies for network systems and services during the 5G/Beyond 5G era. Target topics include, but are not limited to: AI technologies for network and services, mobile and wireless communications, ubiquitous system and communications for applications with/post COVID-19, network security, and network applications. We believe that these are promising technologies to boost the innovation and realizations of future network systems, and we offer a good opportunity to present, share and discuss the state-of-the-art research efforts in English.

Table 1. Recent main themes of NS English sessions.

| Year | Theme |
|------|---|
| 2020 | In-Network Intelligence for Design, Management, and Control of Future Networks and Services |
| 2021 | AI Technologies and Their Applications for Future Network Systems and Services |
| 2022 | Enabling Technologies for Network Systems and Services during the 5G/Beyond 5G Era” |

As mentioned in the previous section, we have continuously organized the English Sessions since 2005. Figure 1 shows transitions of number of submissions to the English Sessions. As shown in the figure, more than 40 papers were constantly submitted in most of the years. In 2020, 2021 and 2022, because of the spread of COVID-19, the paper submissions became decreased unfortunately. In 2022, we have nine paper submissions, and all submitted papers are presented online by Zoom [3]. The topics of papers are widely variety, such as deep learning, federated learning, intra-data center networks, ICN, 5G applications and so on. Without exception, all submitted papers are high quality and well investigated. Thanks to the all speakers and attendees, the English Session has been very active and succeeded. Among the all submitted papers, three papers are selected as especially excellent papers and will be received NS English Session Award.

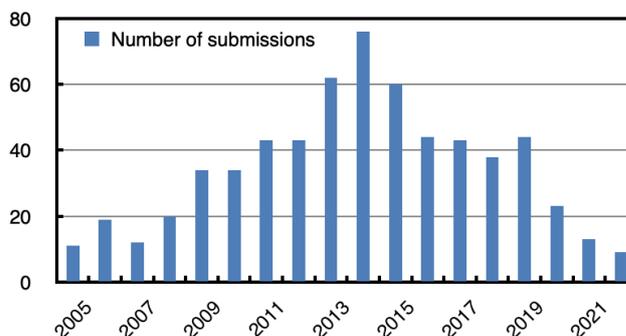


Fig. 1. Transitions of number of paper submissions to NS English Session.

3. Conclusion

In this article, we introduced the activities of NS English Session in the IEICE General Conference, including the latest 2022 NS English Session. Unfortunately, the conference was held online because of the spread of COVID-19, however we continuously contribute to offer a good opportunity to make presentations and discussions in English in the conference.

Although the number of paper submissions become decreased, the technical committee on NS continues to

encourage submissions from Japanese and overseas students as their first steps to international conferences. And we will keep offering an active place for research presentations and discussions to overseas researchers.

Acknowledgement

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4. References

- [1] IEICE Technical Committee on Network Systems website [online]: <http://www.ieice.org/~ns/eng/>.
- [2] IEICE General Conference [online]: <https://www.ieice-taikai.jp/2022general/en/index.html>.
- [3] Zoom [online]: <http://zoom.us/>.