Special Issue

Automatic Speech Recognition and Understanding in Air Traffic Management

Message from the Guest Editors

Since Alexa, OK Google and Siri at the latest, voice recognition has become part of everyday life. It does not only allow us to keep our hands free, when we speak a new address into the navigation system, but it can also reduce workload of air traffic controllers (ATCo) and increases air traffic management (ATM) safety. Voice communication between ATCos and pilots using radio equipment is still widely used in air traffic control (ATC). The ATCo issues verbal commands to the cockpit crew. Whenever the information from voice communication has to be digitized, ATCos are burdened to enter the information – that has already been uttered – manually. Research results show that up to one third of the working time of controllers is spent on these manual inputs. Radar label maintenance is one application of automatic speech recognition and understanding (ASRU). Long known is the support of simulation pilots by ASRU. Another area is, e.g., offline evaluation of historic ATCo-pilot communication to answer questions like:

Guest Editors

Prof. Dr. Hartmut Helmke

Institute of Flight Guidance, Department of Controller Assistance, German Aerospace Center (DLR), 38108 Braunschweig, Germany

Dr. Oliver Ohneiser

Institute of Flight Guidance, Department of Controller Assistance, German Aerospace Center (DLR), 38108 Braunschweig, Germany

Deadline for manuscript submissions

closed (1 November 2023)

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/si/148040

Aerospace
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
aerospace@mdpi.com

mdpi.com/journal/aerospace

Aerospace

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.0

mdpi.com/journal/aerospace

MDPI

About the Journal

Message from the Editor-in-Chief

You are welcome to contribute a research article or a comprehensive review for consideration and publication in *Aerospace* (ISSN 2226-4310), an on-line, open access journal.
Aerospace adheres to rigorous peer-review as well as editorial processes and publishes high quality manuscripts that address both the fundamentals and applications of aeronautics and astronautics. Our goal is to enable rapid dissemination of high impact works to the scientific community.

Editor-in-Chief

Prof. Dr. Konstantinos Kontis
School of Engineering, University of Glasgow, James Watt Building South, University Avenue, Glasgow G12 8QQ, Scotland, UK

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Aerospace) / CiteScore - Q2 (Aerospace Engineering)