



Akshat Shah <akshats1607@gmail.com>

BECS 2025 Notification for Paper: 9838

1 message

BECS 2025 <becs2025@easychair.org>
To: Akshat Shah <akshats1607@gmail.com>

11 May 2025 at 15:59

Dear Akshat Shah,

Thank you for submitting the following paper to the 5th International Workshop on Big data driven Edge Cloud Services (BECS 2025):

9838: Shekhar Tyagi, Akshat Shah, Abhishek Srivastava, Underwater Object Identification with Edge Computing Paradigms

We are happy to inform you that your paper has been accepted as ****a regular paper**** for oral presentation at BECS 2025, Delft, Netherlands on June 30, 2025.

Please find enclosed the reviews concerning your paper. You are kindly requested to read them carefully and revise the paper following their suggestions. Your revised paper will be included in the ICWE 2025 workshop proceedings, which will be published after the ICWE 2025 conference.

1. AUTHOR REGISTRATION

For each accepted paper, at least one author needs to have a regular (non-student) 1-day ICWE 2025 registration and pay the registration fee. You can also have the full pass to get admission to all the ICWE 2025 technical programs comprising technical sessions, keynotes, tutorials, specialized workshops, and a PhD Symposium:

<https://icwe2025.webengineering.org/registration-details/>

Please complete your registration by ****May 31, 2025**** to ensure your paper is included in the post-conference workshop proceedings. We recommend registering by ****May 15th****, which is the deadline for early registration.

2. PAPER PRESENTATION

You need to give ****a 20 min in-person presentation including Q&A****, on the workshop day, June 30, 2025. The tentative workshop schedule is as follows:

-13:30 Lunch
13:30-13:45 Opening
13:45-14:30 Keynote talk
14:30-15:30 Paper session I
15:30-16:00 Coffee Break & Poster Presentation
16:00-17:00 Paper session II
17:00-17:10 Closing

3. CAMERA-READY PAPER

Please submit the files belonging to your camera-ready paper via email (iko@kaist.ac.kr):

- (a) either a zipped file containing all your LaTeX sources or a Word file in the RTF format, and
- (b) PDF version of your camera-ready paper.

Your full paper should have ****a minimum of 12 pages**** and a maximum of 15 pages. Please follow strictly the author instructions of Springer when preparing the final version:

<https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines>

The deadline for submitting the camera-ready versions is ****July 30, 2025****. This is a firm deadline for the production of the workshop proceedings. We will send you detailed instructions on submitting the camera-ready version of your paper after the workshop.

4. JOURNAL PUBLICATION

You will be invited to submit an extended version of the paper to a special issue of the Journal of Web Engineering.

Congratulations again and look forward to seeing you at the workshop in Delft, Netherlands.

Best regards,

In-Young Ko, Michael Mrissa, Juan Manuel Murillo, and Abhishek Srivastava
BECS 2025 Co-chairs
becs2025@easychair.org

SUBMISSION: 9838

TITLE: Underwater Object Identification with Edge Computing Paradigms

----- REVIEW 1 -----

SUBMISSION: 9838

TITLE: Underwater Object Identification with Edge Computing Paradigms

AUTHORS: Shekhar Tyagi, Akshat Shah and Abhishek Srivastava

----- Overall evaluation -----

SCORE: 0 (borderline paper)

----- TEXT:

This paper presents an alternative approach to underwater object detection that avoids traditional image-based methods. Instead, it leverages acoustic sensing, bathymetric data, Doppler shift analysis, and magnetic field perturbation to estimate object properties such as location, shape, material type, and motion state. The proposed system is designed for scenarios where visibility is poor or conventional vision-based models like OpenCV and CNNs are ineffective.

The paper is well motivated, particularly for use cases involving deep-sea exploration or turbid environments. The system integrates a range of sensing modalities and estimation techniques in a cohesive pipeline, and the simulation results are promising. The treatment of acoustic path loss and Doppler shift analysis is handled carefully, and the modeling assumptions are reasonably well justified.

That said, the work remains at the conceptual and simulation level. There is no real-world sensing or prototype hardware validation, and it is unclear how robust the proposed method would be when faced with noisy or incomplete measurements in practical underwater deployments. The technical novelty of the individual components is moderate; the main contribution lies in the integration of techniques rather than new algorithms.

Overall, the direction is interesting, and the motivation is clear. However, given the lack of empirical validation and modest technical depth, the contribution feels somewhat preliminary.

----- REVIEW 2 -----

SUBMISSION: 9838

TITLE: Underwater Object Identification with Edge Computing Paradigms

AUTHORS: Shekhar Tyagi, Akshat Shah and Abhishek Srivastava

----- Overall evaluation -----

SCORE: 2 (accept)

----- TEXT:

This paper proposes a method for detecting underwater objects for surveillance and environmental monitoring. Underwater object detection presents challenges with traditional imaging and videography methods, as they are ineffective in unclear regions and lack bathymetric analysis and path loss models. To address these challenges, the proposed method utilizes an Underwater Acoustic Sensor (UAS) system with sensors strategically placed in a 3D grid setup. Specifically, it incorporates three techniques, Delaunay's Convex Hull, Magnetic Equilibrium, and Doppler's Effect, to enhance object detection performance. Simulation-based experiments, considering a 3D underwater region of 100m x 100m x 100m, demonstrate that the proposed method outperforms existing methods in terms of time complexity and detection accuracy.