

# Kasper A. R. Grøntved, Ph.D. Student

✉ kaspergrontved@gmail.com

🌐 KasperGrontved

🔗 kasperg3

🌐 <https://blog.grontved.dk>



## Employment History

- 2022 – now 📌 **PhD student**, SDU UAS Center, The University of Southern Denmark.
- 2020 – 2022 📌 **Systems Engineer**, A<sup>2</sup>I Systems A/S.
- 2018 – 2020 📌 **Student Programmer**, A<sup>2</sup>I Systems A/S.

## Education

- 2022 – now 📌 **Ph.D., University of Southern Denmark** High Energy Magic.  
Thesis title: *Cooperative Control of Multirobot Systems in Real-World Applications*
- 2018 – 2022 📌 **M.Sc. Advanced Robotic Systems, University of Southern Denmark**  
Thesis title: *Multi-Agent Decentralised Coordination using CNRL for Industrial Applications.*
- 2015 – 2018 📌 **B.Sc. Robotic Systems, University of Southern Denmark**  
Thesis title: *Semantic segmentation using a deep neural network for pose estimation of a rigid object.*

## Research Publications

### Journal Articles

- 1 M.-T. O. Hoang, K. A. R. Grøntved, N. van Berkel, M. B. Skov, A. L. Christensen, and T. Merritt, “Drone swarms to support search and rescue operations: Opportunities and challenges,” *Cultural Robotics: Social Robots and Their Emergent Cultural Ecologies*, pp. 163–176, 2023.

### Conference Proceedings

- 1 K. A. R. Grøntved, U. P. Schultz, and A. L. Christensen, “Decentralized multi-uav trajectory task allocation in search and rescue applications,” in *21st International Conference on Advanced Robotics’ Robots in Unstructured Environments*, IEEE, 2023.
- 2 A. L. Christensen, K. A. R. Grøntved, M.-T. O. Hoang, *et al.*, “The herd project: Human-multi-robot interaction in search & rescue and in farming,” in *Adjunct Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2022, pp. 1–4.
- 3 A. Cumani, A. Guiducci, P. Grattoni, G. Pettiti, and F. Pollastri, “High accuracy localization of calibration points for dimensional measurements by image processing techniques,” in *Fifth International Conference on Advanced Robotics’ Robots in Unstructured Environments*, IEEE, 1991, pp. 1761–1765.

## Skills

- Languages 📌 Strong reading, writing and speaking competencies in English and Danish.
- Coding 📌 C++, Python, Java, SQL, L<sup>A</sup>T<sub>E</sub>X, ROS, FreeRTOS, PyTorch
- Misc. 📌 Academic research, Unix systems, Docker L<sup>A</sup>T<sub>E</sub>X typesetting and publishing.