

**Active-passive two-way ranging protocol for positioning systems = Aktiv-passiivne kauguste mõõtmise protokoll positsioneerimissüsteemidele**

Laadung, Taavi 2023 <https://doi.org/10.23658/taltech.26/2023> <https://digikogu.taltech.ee/et/item/e9906a57-6c88-4a98-860e-d2c567a3109c>  
[https://www.ester.ee/record=b5567510\\*est](https://www.ester.ee/record=b5567510*est)

**Active-passive two-way ranging using UWB**

Laadung, Taavi; Ulp, Sander; Alam, Muhammad Mahtab; Le Moullec, Yannick 2020, 14th International Conference on Signal Processing and Communication Systems, (ICSPCS) December 14-16, 2020 – Virtual Conference : proceedings 2020  
<https://doi.org/10.1109/ICSPCS50536.2020.9309999>

**Adaptive Extended Kalman Filter position estimation based on Ultra-Wideband Active-Passive Ranging Protocol**

Laadung, Taavi; Ulp, Sander; Fjodorov, Aleksei; Alam, Muhammad Mahtab; Le Moullec, Yannick IEEE Access 2023 / p. 92575-92588 <https://doi.org/10.1109/ACCESS.2023.3308696> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Algorithms for learning and adaptation over networks - distributed leader selection = Õppimisalgoritmid hajutatud võrkude tarbeks - juhtsõlme hajus valimine**

Ulp, Sander 2019 <https://digi.lib.ttu.ee/i/?11635> [https://www.ester.ee/record=b5204290\\*est](https://www.ester.ee/record=b5204290*est)

**An algorithm for distributed adaptive network communication**

Ulp, Sander Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 143-147 : ill

**Distributed adaptive network performance with static topology and unweighed communication**

Ulp, Sander; Trump, Tõnu Latest trends in circuits, systems, signal processing and automatic control : [proceedings of the 5th CSCS'14, the 2nd ASAP'14 : Salerno, Italy, June 3-5, 2014] 2014 / p. 126-130 : ill

**Distributed adaptive network with SNR weighed communication**

Ulp, Sander; Trump, Tõnu 2015 Third International Conference on Digital Information, Networking, and Wireless Communications (DINWC 2015) : Moscow, Russia, 3-5 February 2015 2015 / p. 83-87 : ill

**Energy-efficient distributed leader selection algorithm for energy-constrained wireless sensor networks**

Ulp, Sander; Le Moullec, Yannick; Alam, Muhammad Mahtab IEEE Access 2019 / p. 4410-4421 : ill  
<https://doi.org/10.1109/ACCESS.2018.2888551> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Estimating UWB positioning integrity based on ranging residuals**

Tommingas, Mihkel; Ulp, Sander; Alam, Muhammad Mahtab; Mürsepp, Ivo; Laadung, Taavi 2023 24th International Conference on Applied Electromagnetics and Communications (ICECOM) 2023 / 5 p  
<https://doi.org/10.1109/ICECOM58258.2023.10367954>

**Inertial and positioning sensors fusion for indirect location tracking in warehouse inventory management**

Fjodorov, Aleksei; Ulp, Sander; Alam, Muhammad Mahtab; Kuusik, Alar 2023 International Conference on Control, Automation and Diagnosis (ICCAD) 2023 / p. 1-7 <https://doi.org/10.1109/ICCAD57653.2023.10152404>

**Leader selection in cooperative network based on MDL subspace algorithm for cognitive radio**

Ulp, Sander; Trump, Tõnu Conference Record of The Fiftieth Asilomar Conference on Signals, Systems & Computers : November 6-9, 2016, Pacific Grove, California 2017 / p. 704-708 : ill <https://doi.org/10.1109/ACSSC.2016.7869136> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Novel active-passive two-way ranging protocols for UWB positioning systems**

Laadung, Taavi; Ulp, Sander; Alam, Muhammad Mahtab; Le Moullec, Yannick IEEE sensors journal 2022 / p. 5223-5237 : ill  
<https://doi.org/10.1109/JSEN.2021.3125570> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Performance evaluation of UWB active-passive two-way ranging distance estimation matrix weighting methods**

Laadung, Taavi; Ulp, Sander; Alam, Muhammad Mahtab; Le Moullec, Yannick WiP Proceedings of the Twelfth International Conference on Indoor Positioning and Indoor Navigation 2022 / p. paper29 <https://ceur-ws.org/Vol-3248/paper29.pdf> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**UWB positioning integrity estimation using ranging residuals and ML augmented filtering**

Tommingas, Mihkel; Alam, Muhammad Mahtab; Mürsepp, Ivo; Ulp, Sander IEEE Journal of indoor and seamless positioning and navigation 2024 / p. 205-218 <https://doi.org/10.1109/JSPIN.2024.3418296>