

**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>

**Azimuthing propulsion in ice management**

**Hänninen, Samuli; Kujala, Pentti Jouko Sakari; Määttänen, Pirjo; Heideman, Torsten; Korsström, Andrei; Viheriälehto, Sampo; Koponen, Jorma** Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering - OMAE 2024 ; Vol. 6 2024 / art. OMAE2024-127102, V006T07A016 ; 10 pages <https://doi.org/10.1115/OMAE2024-127102> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Automatic position detection and transmitting activation of dynamic wireless power transfer system with air capacitor**

**Pakhaliuk, Bohdan; Husev, Oleksandr; Shevchenko, Viktor; Kroics, Kaspars; Stepins, Deniss; Strzelecki, Ryszard** Wireless Power Week (WPW) : Proceedings 2022 / p. 487-491 <https://doi.org/10.1109/WPW54272.2022.9853972>

**Avermedia Volar GPS A805**

**Jaanus, Martin** Praktiline Arvutikasutaja 2008 / 12, lk. 73 : ill [https://artiklid.elnet.ee/record=b1066255\\*est](https://artiklid.elnet.ee/record=b1066255*est)

**Camera gimbal performance improvement with spinning-mass mechanical gyroscopes**

**Tiimus, Kristjan; Tamre, Mart** 12th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Kuressaare, Estonia, June 11-16, 2012 2012 / p. 160-163 : ill

**Combined positioning system for mapping measured properties of objects of arbitrary shape**

**Sinivee, Veljo; Kurik, Lembit; Kallavus, Urve** Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [1] 2008 / p. 183-188 : ill  
[https://www.researchgate.net/publication/228661344\\_Combined\\_positioning\\_system\\_for\\_mapping\\_measured\\_properties\\_of\\_objects\\_of\\_arbitrary\\_shape](https://www.researchgate.net/publication/228661344_Combined_positioning_system_for_mapping_measured_properties_of_objects_of_arbitrary_shape)

**Communication area based positioning**

**Preden, Jürge-Sören** 2006 IEEE International Conference on Mobile Adhoc and Sensor Systems (MASS) 2006 / p. 336-347  
<https://ieeexplore.ieee.org/document/4053919>

**Deliverable 2.7 Initial AI-Driven Edge Computing and Precise Localization Demonstrator**

**Mürsepp, Ivo** 2023 [Deliverable 2.7 Initial AI-Driven Edge Computing and Precise Localization Demonstrator \(PDF\)](#)

**Development of software for position based control**

**Möller, Taavi** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 84-85 : ill

**Development, implementation and field trial of 5G integrated GNSS-RTK positioning in cross-border settings**

**Elgarhy, Osama; Rohtla, Margus; Ait, Indur; Roosipuu, Priit; Körbe Kaare, Kati; Sadam, Arvi; Kallaspoolik, Toomas; Alam, Muhammad Mahtab** 2024 IEEE Future Networks World Forum (FNWF) 2025 / p. 791-796  
<https://doi.org/10.1109/FNWF63303.2024.11028789>

**DL-AoD estimation-based 5G positioning using directionally transmitted synchronization signals**

**Mürsepp, Ivo; Alam, Muhammad Mahtab** Sensors 2025 / art. 6372 <https://doi.org/10.3390/s25206372> <https://www.mdpi.com/1424-8220/25/20/6372>

**Dynamic positioning system for the multifunctional vessel EVA-316**

**Subarev, Kirill; Vinnikov, Dmitri; Laugis, Juhan** 8th International Workshop on Research and Education in Mechatronics 2007 : 14-15 June 2007, Tallinn, Estonia 2007 / p. 142-145 : ill

**Enhancing UWB and multi-sensor positioning with ML-based uncertainty estimation = Üililairiba ja mitme sensoriga positsioneerimissüsteemide täpsuse parandamine masinõppe meetodil**

**Tommingas, Mihkel** 2025 [https://www.ester.ee/record=b5748107\\*est](https://www.ester.ee/record=b5748107*est) <https://digikogu.taltech.ee/et/Item/7703d05c-98d7-48a6-939d-ab766de4d1c6> <https://doi.org/10.23658/taltech.35/2025>

**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>

#### **Experimental validation and field trials of 5G cross-border connectivity**

**Elgarhy, Osama Mohamed Mostafa; Kulmar, Marika; Roosipuu, Priit; Rohtla, Margus; Le Moullec, Yannick; Körbe Kaare, Kati; Sadam, Arvi; Scholliers, Johan; Alam, Muhammad Mahtab** 2024 IEEE Future Networks World Forum (FNWF) 2024 / p. 57-62  
<https://doi.org/10.1109/FNWF63303.2024.11028794>

#### **GNSS - globaalne satelliitnavigatsioonisüsteem geodeetilise täpsusega asukohamääranguks : öpik kõrgkoolidele**

**Ellmann, Artu; Kall, Tarmo; Kollo, Karin; Liibusk, Aive** 2022 [https://www.ester.ee/record=b5524661\\*est](https://www.ester.ee/record=b5524661*est)

#### **Indoor positioning system based on COTS WSN devices**

**Preden, Jürjo-Sören; Pahtma, Raido; Gordon, Boris; Mötus, Leo** SET-168 : Symposium on Navigation Sensors and Systems in GNSS Denied Environments 2012 / [11 p.] : ill

#### **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>

#### **Innovative tools for tourism and cultural tourism impact assessment**

**Kalvet, Tarmo; Olesk, Maarja; Tiits, Marek; Raun, Janika** Sustainability 2020 / art. 7470, 30 p <https://doi.org/10.3390/SU12187470>  
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Mereakadeemia hakkas õpetama laevade dünaamilist positsioneerimist [Võrguväljaanne]**

Ots, Jaano Martin postimees.ee 2022 ["Mereakadeemia hakkas õpetama laevade dünaamilist positsioneerimist "](#)

#### **A method of comparative spatial analysis of a digitized (LiDAR) point cloud and the corresponding GIS database**

**Maigre, Riina; Haav, Hele-Mai; Lillemets, Rauni; Julge, Kalev; Anton, Gaspar** Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings 2020 / p. 219-232 : ill  
[https://doi.org/10.1007/978-3-030-57672-1\\_17](https://doi.org/10.1007/978-3-030-57672-1_17) [Conference proceeding at Scopus](#) [Article at Scopus](#)

#### **Mobile positioning : methods and a study of accuracy improvement for network based positioning**

**Lemendik, Laur** Raadiotehnika 2001 : VIII rahvusvahelise telekommunikatsioonipäeva materjalid 2001 / lk. 46-53 : ill

#### **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](#)

#### **An open surface drifter for river flow field characterization**

**Fuentes-Pérez, Juan Francisco; Sanz-Ronda, Francisco Javier; Tuhtan, Jeffrey Andrew** Sensors 2022 / art. nr. 9918  
<https://doi.org/10.3390/s22249918> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Optimal parameters of fluidic non contact sensors for drives of exact positioning**

**Leschenko, V.; Pochtar, J.; Reedik, Vello** Proceedings of the Fifth Cranfield Fluidics Conference 1972 / p. J3-29 - J3-40

#### **Performance evaluation of 5G-NR positioning accuracy using time difference of arrival method**

**Müürsepp, Ivo; Kulmar, Marika; Elgarhy, Osama Mohamed Mostafa; Alam, Muhammad Mahtab; Chen, Tao; Horsmanheimo, Seppo; Scholliers, Johan** 2021 IEEE International Mediterranean Conference on Communications and Networking (MeditCom) : Athens, Greece, 7-10 Sept. 2021 / p. 494-499 : ill <https://doi.org/10.1109/MeditCom49071.2021.9647652>

#### **Ruumiinfo süsteemid : globaalne asukoha määramise süsteem**

**Vilu, Raivo** Test Site Estonia : [ideenäituse prospekt] 1996 / lk. 24-25

#### **Satelliitpositsioneerimise täpsustussüsteem WAAS : Wide Area Augmentation System**

**Leini, Mikk A & A** 2009 / 6, lk. 42-52 : ill

#### **Service placement and migration algorithm utilizing precise positioning for connected and automated vehicles**

**Elgarhy, Osama Mohamed Mostafa; Alam, Muhammad Mahtab; Reggiani, Luca; Azeem, Muhammad Moazam** 2023 IEEE Conference on Standards for Communications and Networking (CSCN) 2023 / p. 183-188  
<https://doi.org/10.1109/CSCN60443.2023.10453210>

#### **Simulation of the control system of AC linear positioning drive**

**Liivik, Liisa; Jansikene, Raik** BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 77-78 : ill

#### **Strateegiline positsioneerimine : avalik loeng 1. märtsil TTÜs**

**Leimann, Jaak** Tallinna Tehnikaülikooli aastaraamat 2001 2003 / lk. 248-251

### **Tight coupling of GNSS and IMU using extended Kalman filtering**

Babri, Usman Muhammad; Irfan Haider Jillani, Muhammad; Ahmad, Rizwan; **Alam, Muhammad Mahtab** 2024 19th Biennial Baltic Electronics Conference (BEC) 2024 / 6 p <https://doi.org/10.1109/BEC61458.2024.10737945> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Towards optimal placement and runtime migration of time-sensitive services of connected and automated vehicles**

Elgarhy, Osama Mohamed Mostafa; Le Moullec, Yannick; Reggiani, Luca; Azeem, Muhammad Moazam; Taleb, Tarik; **Alam, Muhammad Mahtab** IEEE Open Journal of Vehicular Technology 2024 / p. 13-33 <https://doi.org/10.1109/OJVT.2024.3496583>

### **Täpse positsioneerimisega lineaarsünkroonajam**

Žuhhovitski, Dmitri; Tuldava, Toomas XXXII üliõpilaste teaduslik-tehnilise konverentsi ettekannete teesid : pühendatud V. I. Lenini 110. sünniaastapäevale : 16.-18. aprill 1980 1981 / lk. 107 [https://www.ester.ee/record=b1322611\\*est](https://www.ester.ee/record=b1322611*est)

### **UWB and GNSS Sensor Fusion Using ML-Based Positioning Uncertainty Estimation**

Tommingas, Mihkel; Laadung, Taavi; Varbla, Sander; Mürsepp, Ivo; **Alam, Muhammad Mahtab** IEEE Open Journal of the Communications Society 2025 / p. 2177-2189 : ill <https://doi.org/10.1109/OJCOMS.2025.3554352>

### **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>

### **Автоматические лазерные системы для пространственного позиционирования объектов**

Velikotnoi, M.; **Kruming, Boris** Тезисы докладов III Всесоюзной конференции "Применение лазеров в технологии и системах передачи и обработки информации", 11-13 ноября 1987 г. 2, [Лазерные измерительные системы] 1987 / с. 85-86 [https://www.ester.ee/record=b1273191\\*est](https://www.ester.ee/record=b1273191*est)

### **Электроприводы для двумерного позиционирования и сканирования, управляемые от ЭВМ**

Гяляжявичюс В.Ю.; Кубилюс В.Ю. Тезисы докладов семинара "Новые разновидности электропривода и возможности их применения" 1990 / с. 38-42: ил