

Resource Summary Report

Generated by PRECISE-TBI on Jul 31, 2026

ArUco

RRID:SCR_026572

Type: Tool

Proper Citation

ArUco (RRID:SCR_026572)

Resource Information

URL: <https://github.com/tomcatsmith19/ArucoDetection>

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Description: Automated rodent behavioral scoring system, complete with 3D design files and code/software. System monitors behavioral engagement using open-source software. 3D design files and necessary software has been made available, as well as code that can be used for data analysis.

Synonyms: Augmented Reality University of Cordoba, Aruco

Resource Type: instrument resource, software resource, source code

Defining Citation: [DOI:10.1523/ENEURO.0500-23.2024](https://doi.org/10.1523/ENEURO.0500-23.2024)

Keywords: OpenBehavior, Aruco marker based tracking, pose estimation, rodent behavioral session,

Funding: NINDS R01NS110823;
United States (US) Department of Veterans Affairs Rehabilitation Research and Development Service ;
University of Texas at Dallas

Availability: Free, Available for download, Freely available

Resource Name: ArUco

Resource ID: SCR_026572

Alternate URLs: <https://edspace.american.edu/openbehavior/project/aruco-markers/>

Record Creation Time: 20250314T060334+0000

Record Last Update: 20260731T043218+0000

Ratings and Alerts

No rating or validation information has been found for ArUco.

No alerts have been found for ArUco.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 14 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

??elechowski M, et al. (2025) Augmented reality navigation in orthognathic surgery: Comparative analysis and a paradigm shift. Healthcare technology letters, 12(1), e12109.

Li J, et al. (2025) YOLO-LaserGalvo: A Vision-Laser-Ranging System for High-Precision Welding Torch Localization. Sensors (Basel, Switzerland), 25(20).

Silva KGFD, et al. (2025) Bean leaf image dataset annotated with leaf dimensions, segmentation masks, and camera calibration. Data in brief, 59, 111328.

Yu C, et al. (2024) MLG-YOLO: A Model for Real-Time Accurate Detection and Localization of Winter Jujube in Complex Structured Orchard Environments. Plant phenomics (Washington, D.C.), 6, 0258.

Hoch A, et al. (2024) Augmented reality-guided pelvic osteotomy of Ganz: feasibility in cadavers. Archives of orthopaedic and trauma surgery, 144(3), 1077.

Moissenet F, et al. (2024) ArUco-based stylus reliability for reproducible 3D digitalisation of shoulder cartilage contours. Journal of anatomy, 244(4), 620.

Vercruyssen TGA, et al. (2023) Cost of Transport of Undulating Fin Propulsion. Biomimetics (Basel, Switzerland), 8(2).

Doughty M, et al. (2022) Head-Mounted Display-Based Augmented Reality for Image-Guided Media Delivery to the Heart: A Preliminary Investigation of Perceptual Accuracy. Journal of imaging, 8(2).

Ortiz-Fernandez LE, et al. (2021) Smart Artificial Markers for Accurate Visual Mapping and Localization. Sensors (Basel, Switzerland), 21(2).

Liu X, et al. (2021) Hybrid electromagnetic-ArUco tracking of laparoscopic ultrasound transducer in laparoscopic video. Journal of medical imaging (Bellingham, Wash.), 8(1), 015001.

Kalybek M, et al. (2021) Performance of Optical Structural Vibration Monitoring Systems in Experimental Modal Analysis. Sensors (Basel, Switzerland), 21(4).

Popescu DC, et al. (2020) High Precision Positioning with Multi-Camera Setups: Adaptive Kalman Fusion Algorithm for Fiducial Markers. *Sensors (Basel, Switzerland)*, 20(9).

Habert S, et al. (2017) Application of an RGBD augmented C-arm for minimally invasive scoliosis surgery assistance. *Healthcare technology letters*, 4(5), 179.

Borrego A, et al. (2016) Feasibility of a walking virtual reality system for rehabilitation: objective and subjective parameters. *Journal of neuroengineering and rehabilitation*, 13(1), 68.