## James Patrick Underwood

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7271106/publications.pdf

Version: 2024-02-01

44 papers 2,125 citations

331670 21 h-index 395702 33 g-index

44 all docs

44 docs citations

times ranked

44

1712 citing authors

| #  | Article                                                                                                                                                                                                                                                       | lF   | Citations |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1  | Pairwise comparison locomotion scoring for dairy cattle. Journal of Dairy Science, 2021, 104, 6185-6193.                                                                                                                                                      | 3.4  | 7         |
| 2  | A procedure for automated tree pruning suggestion using LiDAR scans of fruit trees. Computers and Electronics in Agriculture, 2021, 187, 106274.                                                                                                              | 7.7  | 14        |
| 3  | SimTreeLS: Simulating aerial and terrestrial laser scans of trees. Computers and Electronics in Agriculture, 2021, 187, 106277.                                                                                                                               | 7.7  | 7         |
| 4  | Graph-based methods for analyzing orchard tree structure using noisy point cloud data. Computers and Electronics in Agriculture, 2021, 187, 106270.                                                                                                           | 7.7  | 15        |
| 5  | Reliability of a commercial platform for estimating flower cluster and fruit number, yield, tree geometry and light interception in apple trees under different rootstocks and row orientations. Computers and Electronics in Agriculture, 2021, 191, 106519. | 7.7  | 13        |
| 6  | Multimodal obstacle detection in unstructured environments with conditional random fields. Journal of Field Robotics, 2020, 37, 53-72.                                                                                                                        | 6.0  | 25        |
| 7  | Replacing traditional light measurement with LiDAR based methods in orchards. Computers and Electronics in Agriculture, 2020, 179, 105798.                                                                                                                    | 7.7  | 11        |
| 8  | Spectral filter design based on in-field hyperspectral imaging and machine learning for mango ripeness estimation. Computers and Electronics in Agriculture, 2019, 164, 104890.                                                                               | 7.7  | 32        |
| 9  | Monocular Camera Based Fruit Counting and Mapping With Semantic Data Association. IEEE Robotics and Automation Letters, 2019, 4, 2296-2303.                                                                                                                   | 5.1  | 52        |
| 10 | Ground based hyperspectral imaging for extensive mango yield estimation. Computers and Electronics in Agriculture, 2019, 157, 126-135.                                                                                                                        | 7.7  | 35        |
| 11 | Object Detection for Cattle Gait Tracking. , 2018, , .                                                                                                                                                                                                        |      | 38        |
| 12 | Maturity estimation of mangoes using hyperspectral imaging from a ground based mobile platform. Computers and Electronics in Agriculture, 2018, 155, 298-313.                                                                                                 | 7.7  | 63        |
| 13 | Machine vision assessment of mango orchard flowering. Computers and Electronics in Agriculture, 2018, 151, 501-511.                                                                                                                                           | 7.7  | 43        |
| 14 | Light interception modelling using unstructured LiDAR data in avocado orchards. Computers and Electronics in Agriculture, 2018, 153, 177-187.                                                                                                                 | 7.7  | 21        |
| 15 | Image Segmentation for Fruit Detection and Yield Estimation in Apple Orchards. Journal of Field Robotics, 2017, 34, 1039-1060.                                                                                                                                | 6.0  | 319       |
| 16 | Illumination compensation in ground based hyperspectral imaging. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 129, 162-178.                                                                                                                      | 11.1 | 37        |
| 17 | Efficient inâ€field plant phenomics for rowâ€crops with an autonomous ground vehicle. Journal of Field Robotics, 2017, 34, 1061-1083.                                                                                                                         | 6.0  | 80        |
| 18 | Deep fruit detection in orchards. , 2017, , .                                                                                                                                                                                                                 |      | 280       |

| #  | Article                                                                                                                                                                            | IF  | Citations |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Extrinsic Parameter Calibration for Line Scanning Cameras on Ground Vehicles with Navigation Systems Using a Calibration Pattern. Sensors, 2017, 17, 2491.                         | 3.8 | 10        |
| 20 | Image Based Mango Fruit Detection, Localisation and Yield Estimation Using Multiple View Geometry. Sensors, 2016, 16, 1915.                                                        | 3.8 | 199       |
| 21 | Mapping almond orchard canopy volume, flowers, fruit and yield using lidar and vision sensors. Computers and Electronics in Agriculture, 2016, 130, 83-96.                         | 7.7 | 123       |
| 22 | Self-supervised weed detection in vegetable crops using ground based hyperspectral imaging. , 2016, , .                                                                            |     | 47        |
| 23 | Image classification with orchard metadata. , 2016, , .                                                                                                                            |     | 7         |
| 24 | A Pipeline for Trunk Detection in Trellis Structured Apple Orchards. Journal of Field Robotics, 2015, 32, 1075-1094.                                                               | 6.0 | 35        |
| 25 | Using the Polarization of Millimeterâ€wave Radar as a Navigation Aid. Journal of Field Robotics, 2015, 32, 3-19.                                                                   | 6.0 | 10        |
| 26 | Lidarâ€Based Tree Recognition and Platform Localization in Orchards. Journal of Field Robotics, 2015, 32, 1056-1074.                                                               | 6.0 | 40        |
| 27 | Radar Sensing for Intelligent Vehicles in Urban Environments. Sensors, 2015, 15, 14661-14678.                                                                                      | 3.8 | 61        |
| 28 | A Selfâ€kearning Framework for Statistical Ground Classification using Radar and Monocular Vision. Journal of Field Robotics, 2015, 32, 20-41.                                     | 6.0 | 41        |
| 29 | LiDAR Based Tree and Platform Localisation in Almond Orchards. Springer Tracts in Advanced Robotics, 2015, , 469-483.                                                              | 0.4 | 8         |
| 30 | A Feature Learning Based Approach for Automated Fruit Yield Estimation. Springer Tracts in Advanced Robotics, 2015, , 485-498.                                                     | 0.4 | 43        |
| 31 | Visual ground segmentation by radar supervision. Robotics and Autonomous Systems, 2014, 62, 696-706.                                                                               | 5.1 | 19        |
| 32 | A Self-Learning Ground Classifier Using Radar Features. Springer Tracts in Advanced Robotics, 2014, , 629-642.                                                                     | 0.4 | 0         |
| 33 | Selective Combination of Visual and Thermal Imaging for Resilient Localization in Adverse Conditions: Day and Night, Smoke and Fire. Journal of Field Robotics, 2013, 30, 641-666. | 6.0 | 44        |
| 34 | Decentralized Coordinated Tracking with Mixed Discrete–Continuous Decisions. Journal of Field Robotics, 2013, 30, 717-740.                                                         | 6.0 | 22        |
| 35 | Multi-sensor identity tracking with event graphs. , 2013, , .                                                                                                                      |     | 4         |
| 36 | Orchard fruit segmentation using multi-spectral feature learning. , 2013, , .                                                                                                      |     | 60        |

| #  | Article                                                                                                                               | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Self-learning classification of radar features for scene understanding. Robotics and Autonomous Systems, 2012, 60, 1377-1388.         | 5.1 | 34        |
| 38 | Radarâ€based perception for autonomous outdoor vehicles. Journal of Field Robotics, 2011, 28, 894-913.                                | 6.0 | 48        |
| 39 | Short-Range Radar Perception in Outdoor Environments. Lecture Notes in Computer Science, 2011, , 265-276.                             | 1.3 | 4         |
| 40 | Error modeling and calibration of exteroceptive sensors for accurate mapping applications. Journal of Field Robotics, 2010, 27, 2-20. | 6.0 | 61        |
| 41 | Dynamic path planning with multi-agent data fusion - The Parallel Hierarchical Replanner. , 2009, , .                                 |     | 6         |
| 42 | Towards reliable perception for Unmanned Ground Vehicles in challenging conditions., 2009,,.                                          |     | 62        |
| 43 | Calibration of range sensor pose on mobile platforms. , 2007, , .                                                                     |     | 39        |
| 44 | Mutual Information based Sensor Registration and Calibration. , 2006, , .                                                             |     | 6         |