

著書

1. Kohei Arai, Computer Input by Human Eyes Only and Its Applications, Intelligent Systems in Science and Information, 2014, Studies in Computer Intelligence, 591, 1-22, Springer Publishing Co. Ltd., 2015.

論文

1. Herman Tolle, Aryo Pinandito, Erq Muhammad Adans J, Kohei Arai, Virtual reality game controlled with users' head and body movement detection using smartphone sensors, Asian Research Publishing Network: ARPN Journal of Engineering and Applied Sciences, ISSN 1819-6608, 2015.
2. Kohei Arai, Yahoo! Search and web API utilized mashup based e-learning content search engine for mobile learning, International Journal of Advanced Research on Artificial Intelligence, 4, 6, 1-7, 2015.
3. Kohei Arai, Psychological status monitoring with cerebral blood flow: CBF, Electroencephalogram: EEG and Electro-Oculogram: EOG measurements, International Journal of Advanced Research on Artificial Intelligence, 4, 6, 8-15, 2015.
4. Kohei Arai, Relations between psychological status and eye movements, International Journal of Advanced Research on Artificial Intelligence, 4, 6, 16-22, 2015.
5. Kohei Arai, Takuto Konishi, Mobile device based personalized equalizer for improving hearing capability of human voices in particular for elderly persons, International Journal of Advanced Research on Artificial Intelligence, 4, 6, 23-27, 2015.
6. Kohei Arai, Toshiya Katano, Trend analysis of relatively large diatoms which appear in the intensive study area of the Ariake Sea, Japan in winter (2011-2015) based on remote sensing satellite data, International Journal of Advanced Research on Artificial Intelligence, 4, 7, 15-20, 2015.
7. Kohei Arai, Taka Eguchi, Realistic rescue simulation method with consideration of road network restrictions, International Journal of Advanced Research on Artificial Intelligence, 4, 7, 21-28, 2015.
8. Kohei Arai, Masanori Sakashita, Osamu Shigetomi, Yuko Miura, Relation between rice crop quality (protein content) and fertilizer amount as well as rice stump density derived from helicopter data, International Journal of Advanced Research on Artificial Intelligence, 4, 7, 29-34, 2015.
9. Kohei Arai, Yoshihiko Sasaki, Shihomi Kasuya, Hideto Matsuura, Appropriate tealeaf harvest timing determination based on NIR images of tealeaves, International Journal of Information Technology and Computer Science, 7, 7, 1-7, 2015

10. Kohei Arai, Psychological status monitoring with cerebral blood flow, electroencephalogram and electrooculogram measurements, *Journal of Information Technology and Computer Science*, 7, 8, 1-7, 2015
11. Kohei Arai, Seamless location measurement system with WiFi beacon utilized and GPS based systems in both of Indoor and outdoor receiver location measurement, *International Journal of Advanced Research on Artificial Intelligence*, 4, 7, 35-40, 2015.
12. Kohei Arai, Indra Nugraha Abdullah, Kensuke Kubo, Katsumi Sugawa, Methods for wild pig identifications from moving picture and discrimination of female wild pigs based on feature matching method, *International Journal of Advanced Research on Artificial Intelligence*, 4, 7, 41-46, 2015.
13. Kohei Arai, Locality of chlorophyll-a concentration in the intensive study area of the Ariake Sea, Japan in winter seasons based on remote sensing satellite data, *International Journal of Advanced Research on Artificial Intelligence*, 4, 7, 18-25, 2015.
14. Kohei Arai, Yoshihiko Sasaki, Shihomi Kasuya, Hideo Matsura, Appropriate harvest timing determination referring fiber content in tealeaves derived from ground based NIR camera images, *International Journal of Advanced Research on Artificial Intelligence*, 4, 8, 26-33, 2015.
15. Kohei Arai, Steven Ray Sentinuwo, Driver's awareness and lane changing maneuver in traffic flow based on cellular automata model, *International Journal of Advanced Research on Artificial Intelligence*, 4, 8, 34-41, 2015.
16. H. Ohyam, S. Kawakami, Tetsu Tanaka, Isamu Morino, O. Uchino, Makoto Inoue, T. Sakai, T. Nagai, A. Yamazaki, A. Uchiyama, T. Fukamachi, M. Sakashita, T. Kawasaki, T. Akaho, Kohei Arai, H. Okumura, Observations of XCO₂ and XCH₄ with ground-based high-resolution FTS at Saga, Japan and comparisons with GOSAT products, *Journal of Atmospheric Measurement Techniques Discussion*, 8, 8, 8257-8294, 2015
17. Kohei Arai, Masanori Sakashita, Osamu Shigetomi, Yuko Miura, Estimation of Rice Crop Quality and Harvest Amount from Helicopter Mounted NIR Camera Data and Remote Sensing Satellite Data, *International Journal of Advanced Research on Artificial Intelligence*, 4, 10, 16-22, 2015.
18. Kohei Arai, Relation Between Chlorophyll-a Concentration and Red Tide in the Intensive Study Area of the Ariake Sea, Japan in Winter Seasons by Using MODIS Data, *International Journal of Advanced Research on Artificial Intelligence*, 4, 10, 8-15, 2015.
19. Kohei Arai, Vicarious calibration data screening method based on variance of surface reflectance and atmospheric optical depth together with cross calibration, *International Journal of Advanced Research on Artificial Intelligence*, 4, 11, 1-8, 2015.
20. Kohei Arai, Kenta Azuma, Method for surface reflectance estimation with MODIS by means

of bi-section between MODIS and estimated radiance as well as atmospheric correction with sky-radiometer, *International Journal of Advanced Research on Artificial Intelligence*, 4, 11, 8-15, 2015.

21. Kohei Arai, Takuji Maekawa, Toshihisa Maeda, Hiroshi Sekiguchi, Noriyuki Masago, Effect of sensitivity improvement of visible to near infrared digital cameras on NDVI measurement in particular for agricultural field monitoring, *International Journal of Advanced Research on Artificial Intelligence*, 4, 12, 1-8, 2015.
22. Cahya Rahmad, Kohei Arai, Comparison contour extraction based on layered structure and Fourier descriptor on image retrieval, *International Journal of Advanced Computer Science and Applications*, 6, 12, 71-74, 2015.
23. Iqbal Ahmed, Hiroshi Okumura, Kohei Arai, Analysis on existing basic SLAs and Green SLAs to define new sustainable green SLA, *International Journal of Advanced Computer Science and Applications*, 6, 12, 100-108, 2015.

査読付きコンファレンス論文

1. Kohei Arai, Rescue system with sensor network for physical and psychological health monitoring, *Proceedings of the International Seminar on Intelligent Technology and Its Applications: ISITIA 2015, (Keynote Speech)*, 2015.
2. Kohei Arai, Computer vision for remote sensing, *Proceedings of the Special Lecture on Computer Vision for Remote Sensing of Agriculture, #1*, 2015.
3. Kohei Arai, Remote Sensing for Agriculture, *Proceedings of the Special Lecture on Computer Vision for Remote Sensing of Agriculture, #2*, 2015.
4. Whing Ayu Lestari, Yeni Herdiyeni, Wahyudi Hasbi, Lilik Badi, Presetyo, Kohei Arai, H.Okumura, Nitrogen estimation of paddy based on leaf reflectance using artificial neural network, *Proceedings of the 7th International Conference on Soft Computing and Pattern Recognition, SOCPAR 2015, PID: 3931613*, 2015.
5. Kohei Arai, Rescue system with sensor network for physical and psychological health monitoring, *Proceedings of the SAI Conference 2015*
6. Herman Tolle Kohei Arai, Aryo Pinandto, Adaptation of Composite E-Learning Contents for Reusable in Smartphone Based on Learning System, *Proceedings of the International Conference on Advanced Computer Science and Information Systems 2014, 502-507, DOI10-1109/ICANSIS 2014, 7065895, IEEE, 2014*
7. Tri Harsono, Ali Ridho, Kohei Arai, Muriffin, Human Behavior Based Evacuation in a Large Room Using Cellular Automata Model for Pedestrian Dynamics, *Proceeding of the 3rd Indonesian Japanese Conference on Knowledge Creation and Intelligent Computing, 96-101*, 2014.
8. Hiroshi Okumura, Kohei Arai, Improvement of PM2.5 density distribution visualization

- system using ground-level sensor network and Mie lidar, Proceedings of the Conference on Remote Sensing of Clouds and the Atmosphere of SPIE Remote Sensing, ERS15-RS104-50, 2014.
9. Herman Tolle, Aryo Pinandto, Eric Muhamad, Adans J., Kohei Arai, Virtual reality game controlled with user's head and body movement detection using smartphone sensors, Proceedings of the International Conference on Electrical and Electronics Engineering IC3E 2015, #96, 2015.
 10. H.Okumura, T.Akaho, Y.Kojiro, S.Okano, O.Uchino, I.Morino, T.Yokota, T.Nagano, T.Sakai, T.Maki, A.Yamazaki Kohei Arai, Improvement of pm2.5 density distribution visualization system using ground-level sensor network and Mie lidar, Proceedings of the SPIE R/S, P.9640-46, 21-24, 2015.
 11. Whing Agy Lestari, Yeni Herdiyeni, Wahyadi Hasbi, Lilik Budi Prasetyo, Kohei Arai, H.Okumura, Nitrogen Estimation of Paddy Based on Leaf Reflectance Using Artificial Neural Network, Proceedings of the 7th International Conference on Soft Computing and Pattern Recognition, SOCPAR 2015, PID:3931613, 2015.
 12. Steven Ray Sentinuwo, Kohei Arai, A simulation study of traffic agent to identify traffic flow density using modified traffic cellular automata model, Proceedings of the 1st International Conference on Wireless and Technics, ICWT 2015,
 13. Setis Darmawan Afandi, Yeni Herdiyeni, Lilik Prasetyo, Wahyudi Hasbi, Kohei Arai, H.Okumura, Nitrogen Content Estimation of Rice Crop Based on Near Infrared (NIR) Reflectance Using Artificial Neural Network (ANN), Proceedings of the 2nd International Symposium on LAPAN-IPB Satellite 2015, 1-7, 2015.
 14. Osamu Fukuda, Tatsuma Shimizu, Hiroshi Okumura, Kohei Arai, Satoshi Murai, Image analysis of thing cross-sectional proportion, Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2015.
 15. Ari Sandhyavitri, Fajar Restuhadi, Rudianda Sulainan, Kohei Arai, Sigit Sutikno, Assessment of Mangrove Carbon Stock Based on Remote Sensing (RS) Geographic Information System (GIS) and Ground Check (GC) Methods in Indragiri Hilir Indonesia, Proceedings of the ICCOE Conference, 2015.