



# Curriculum Vitae

## Department of Agricultural Engineering

### Universitas Brawijaya

<b>Name</b>	<b><i>Yusuf Hendrawan STP., M.App.Life Sc., Ph.D</i></b>		
<b>Position</b>	<i>Teaching area: Bioinstrumentation, control, and systems engineering</i> <i>Associate Prof. in Bachelor of Agricultural Engineering Study Programme</i>		
<b>Academic career</b>	<b><i>Initial academic appointment</i></b>	<i>Agricultural Engineering Department, Universitas Brawijaya</i>	<i>2004</i>
	<b><i>Doctoral degree</i></b>	<i>Applied Life Sciences, Osaka Prefecture University, Japan</i>	<i>2012</i>
	<b><i>Master degree</i></b>	<i>Applied Life Sciences, Osaka Prefecture University, Japan</i>	<i>2009</i>
	<b><i>Undergraduate degree</i></b>	<i>Agricultural Engineering, Institut Pertanian Bogor, Indonesia</i>	<i>2003</i>
<b>Employment</b>	<b><i>Lecturer</i></b>	<i>Agricultural Engineering Department, Universitas Brawijaya</i>	<i>2004-Now</i>
	<b><i>Department secretary</i></b>	<i>Agricultural Engineering Department, Universitas Brawijaya</i>	<i>2013-2015</i>
	<b><i>Vice Dean of Student Affair</i></b>	<i>Faculty of Agricultural Technology, Universitas Brawijaya</i>	<i>2015-2023</i>
<b>Research and development projects over the last 5 years</b>	<ul style="list-style-type: none"> <li>- <i>The Application of Artificial Intelligence in Antioxidant Modeling of "African Leaves" Using Machine Vision And Fluorescence, 2020, 50M IDR</i></li> <li>- <i>Development of a Smart Plant Factory by Applying Plant Growth and Production-Enhancing Technology using Sound Exposure (Sonic Bloom), 2019, 50M IDR</i></li> <li>- <i>Development of cassava dryer using machine vision (Batch 1), 2016, 75M IDR</i></li> <li>- <i>Development of cassava dryer using machine vision (Batch 2), 2017, 75M IDR</i></li> </ul>		
<b>Industry collaborations over the last 5 years</b>			
<b>Patents and proprietary rights</b>	<ul style="list-style-type: none"> <li>- <i>Intelligent lighting system in plant factory</i></li> <li>- <i>Intelligent irrigation system in plant factory</i></li> <li>- <i>Purity, Phenol, and pH detection of Kopi Luwak using machine vision</i></li> <li>- <i>Coconut maturity detection using machine vision</i></li> <li>- <i>Plant acoustic frequency technology (PAFT) using Gamelan music</i></li> <li>- <i>Cassava chips dryer using machine vision</i></li> <li>- <i>Nitrogen detection in spinach using machine vision</i></li> </ul>		
<b>Important publications over the last 5 years</b>	<i>Selected recent publications from a total of approx. 15 papers:</i> <ul style="list-style-type: none"> <li>- <b><i>Hendrawan, Y., Diyaratnasari, A., Sandra, Rachmawati, M., Wibisono, Y. 2020. Purification of sugarcane juice (Saccharum officinarum L.) using chitosan membrane with dead-end flow system. International Journal on Advance Science, Engineering, and Information Technology. 10 (6), 2367-2377.</i></b></li> </ul>		



	<ul style="list-style-type: none"><li>- <b>Hendrawan, Y., Putri, N.F., Hawa, L.C., Rachmawati, M., Argo, B.D.</b> 2020. <i>Modelling and optimization of alginate-chitosan concentration towards tensile strength pervaporation membrane based polyethersulfone-biopolymer by using response surface methodology. International Journal on Advance Science, Engineering, and Information Technology.</i> 10 (4), 1654-1661.</li><li>- <b>Hendrawan, Y., Putra, A.H., Sumarlan, S.H., Dhjoyowasito, G.</b> 2020. <i>Plant acoustic frequency technology control system to increase vegetative growth i red-lettuce. TELKOMNIKA.</i> 18(4), 2042-2052.</li><li>- <b>Hendrawan, Y., Rizky, A., Susilo, B., Prasetyo, J., Damayanti, R.</b> 2020. <i>The effect of javanese gamelan music on the growth of chinese broccoli. PERTANIKA Journal of Science &amp; Technology.</i> 28(1), 69-90.</li><li>- <b>Hendrawan, Y., Widyaningtyas, S., Sucipto.</b>2019. <i>Computer vision for purity, phenol, and pH detection of Luwak Coffee green bean. TELKOMNIKA.</i> 17(6), 3073-3085.</li><li>- <b>Hendrawan, Y., Amini, A., Maharani, D.M., Sandra.</b> 2019. <i>Intelligent non-invasive sensing method in identifying coconut (coco nucifera var. Ebunea) ripeness using computer vision and artificial neural network. PERTANIKA Journal of Science &amp; Technology.</i> 27(3), 1317-1339.</li><li>- <b>Hendrawan, Y., Sabrinauly, Hawa, L.C., Rachmawati, M., Argo, B.D.</b> 2019. <i>Analysis of the phenol and flavanoid content from basil leaves (ocinum americanum L) wxtract using pulsed electric field (PEF) pre-treatment. Agricultural Engineering International: CIGR Journal.</i> 21(2), 149-158.</li><li>- <b>Hendrawan, Y., Sakti, I.M., Wibisono, Y., Rachmawati, M., Sandra.</b> 2018. <i>Image analysis using color co-occurrence matrix textural features for predicting nitrogen content in spinach. TELKOMNIKA.</i> 16(6), 2712-2724.</li><li>- <b>Hendrawan, Y., Al Riza, D.F.</b> 2016. <i>Machine vision optimization using nature-inspired algorithms to model sunagoke moss water status. International Journal on Advance Science, Engineering, and Information Technology.</i> 6(1), 45-57.</li></ul>
Activities in specialist bodies over the last 5 years	-