

Please submit 1 page per person

Name	Edi Winarko			
Post	Operations Research and Compuation - (Lecturer)			
Academic career	Lecturer	Universitas Airlangga	1993	
	Master (Mathematics)	Institut Teknologi Bandung	2015	
	Undergraduate degree (Mathematics)	Universitas Airlangga	1992	
Employment	Lecturer	Universitas Airlangga	1993-present	
Research and development projects over the last 5 years	Name of project or research focus	Period and any other information	Partners, if applicable	Amount of financing
	Improved Multi-task Snake Optimizer Algorithm for Optimizing Goods Distribution with Time Windows in Minimizing Distance and Time Simultaneously	2023	Asri Bekti Pratiwi, Auli Damayanti	41 million
Industry collaborations over the last 5 years	-			
Patents and proprietary rights	- Template Pembangkit Soal (Exam Generator)	EC00202318425 (000451348)	HAKI	
	- Sistem Pembelajaran Drill Ujian Sekolah	S00202307009	Simple Patent (On Process)	
Important publications over the last 5 years	<p>Selected recent publications from a total of approx. (give total number): 5</p> <ol style="list-style-type: none"> E. Winarko, E. Roesminingsih., Designing A Generating System Multiple Choice Questions, 2019, <i>Journal of Physics Series.</i>, Vol 1387, 012022. Edi Winarko, Modification of Playfair Chiper to Strengthen Playfair Chiper Algorithm with 2 Key Layer Matrix (KLM) Method, <i>International Journal of Innovation, Creativity and Change</i>, 2019, 5(3), 602-619. L. Fitriyani, L.A. Zerinda, A.B. Pratiwi, E. Winarko, 3-D Packing in Container using Teaching Learning Based Optimization Algorithm, <i>Baghdad Science Journal</i>, 2023, 20(1), 196 – 205. 			

	<p>4. Edi Winarko, Radifan Darari, Auli Damayanti, Encryption and Decryption Application on Images with Hybrid Algorithm Vigenere and RSA, <i>Contemporary Mathematics and Applications</i>, 2020, 2(1), 109-117.</p> <p>5. Pratama B.M, Damayanti A, Winarko E., Signature image identification using hybrid backpropagation with firefly algorithm and simulated annealing, <i>AIP Conference Proceedings</i>, 2021, 2329, 050016.</p> <p>6.</p>						
Activities in specialist bodies over the last 5 years	<table border="1"> <thead> <tr> <th data-bbox="526 510 829 564">Organisation</th> <th data-bbox="829 510 1069 564">Role</th> <th data-bbox="1069 510 1436 564">Period</th> </tr> </thead> <tbody> <tr> <td data-bbox="526 564 829 649"></td> <td data-bbox="829 564 1069 649"></td> <td data-bbox="1069 564 1436 649"></td> </tr> </tbody> </table>	Organisation	Role	Period			
Organisation	Role	Period					