

Selected International Publications by **Sourav Kundu**(between 1995 and 2002).

1. Gero, J. S., Louis, S. and **Kundu, S.** : Evolutionary learning of novel grammars for design improvement, "*Artificial Intelligence in Engineering Design, Analysis and Manufacture (AIEDAM)*", (Special Issue on Machine Learning in Design). Vol. **8**(2): pp. 83-94, **1994**.
2. Osyczka, A. and **Kundu, S.** : A new method to solve generalized multicriteria optimization problems using the simple genetic algorithm "*Structural Optimization*" Vol. **10**(2): pp. 94-99, **1995**.
3. **Kundu, S.** and Kawata, S. : Genetic algorithms for optimal feedback control design. "*Engineering Applications of Artificial Intelligence*" - Special Issue on AI in Design Applications. Vol. **9**(4): pp. 403-411, **1996**.
4. Osyczka, A. and **Kundu, S.** : A modified distance method for multicriteria optimization, using genetic algorithms. "*Computers in Industrial Engineering*"- Special Issue on Genetic Algorithms. Vol. **30**(4): pp. 871-882, **1996**.
5. Maher, M. L., **Kundu, S.** : Adaptive design using a genetic algorithm. *Formal Design Methods for CAD* (Selected papers from Proceedings of the IFIP TC5/WG5.2 Workshop Tallinn, Estonia, 16-19 June 1993). Eds. Gero, J. S. and Tyugu, E., North-Holland, Amsterdam. **1995**.
6. **Kundu, S.** and Kawata, S. : Evolving fuzzy rules for adaptive reasoning in fuzzy logic controllers, In *Proceeding of the First Asian Control Conference*, 27th - 30th July, 1994, Vol. 1, © **1994**, SICE, Tokyo, Japan. pp. 467-470.
7. Osyczka, A. and **Kundu, S.** : A genetic algorithm based multicriteria optimization method. In *Proceedings of the First World Congress of Structural and Multidisciplinary Optimization*, 28th May - 2nd June, **1995**, ISSMO, Goslar, Germany. 1995, Elsevier Science, Kidlington, Oxford, UK. pp. 909-914.
8. **Kundu, S.**; Kawata, S. and Watanabe, A. : Modeling emergent behavior for control systems. In *Proceedings of the IVth Golden West International Conference on Intelligent Systems*, 12th - 14th June, **1995**, International Society for Computers and Their Applications (ISCA), 8820 Six Forks Road, Raleigh, NC. pp. 86-90.
9. Osyczka, A. and **Kundu, S.** : Using genetic algorithms to solve multicriteria nonlinear programming problems. In *Proceedings of Genetic Algorithms '95*, (MENDEL - 95) - International Conference, 26th - 28th September **1995**, Brno, Czech Republic. pp. 175-183.
10. Osyczka, A. and **Kundu, S.** : An approach to design optimization using evolutionary computation techniques. In *Proceedings of the 2nd China-Japan Symposium on Optimization of Structural and Mechanical System*, Oct. 29 to Nov. 2, **1995**, Beijing, China, pp. 158-165.
11. **Kundu, S.** and Kawata, S. : AI in control system design using a new paradigm for design representation. In J. S. Gero and F. Sudweeks (Eds) *Artificial Intelligence in Design '96*, Kluwer Academic Publishers, Dordrecht, The Netherlands. pp. 135-150, **1996**.
12. **Kundu, S.** and Hellgardt, M. : A networks approach for representation and evolution of shape grammars. In J. S. Gero and F. Sudweeks (Eds) *Artificial Intelligence in Design '96*, Kluwer Academic Publishers, Dordrecht, The Netherlands. pp. 291-310, **1996**.
13. **Kundu, S.**; Kawata, S. and Watanabe, A. : A multicriteria approach to control system design with genetic algorithm In *Proceedings of IFAC '96 - 13th World Congress*, June 30th - July 5th, **1996**, San Francisco, USA. International Federation of Automatic Control (IFAC). Elsevier Science, Kidlington, UK. Volume D, pp. 315-320.
14. **Kundu, S.** : A multicriteria genetic algorithm to solve optimization problems in structural engineering design. In Kumar, B. (Ed.) *Information Processing in Civil and Structural Engineering Design*, 14th - 16th August **1996**, Glasgow, Scotland. Civil-Comp Press Ltd. Edinburgh, Scotland. pp. 225-233.

15. **Kundu, S** and Osyczka, A. : Genetic multicriteria optimization of structural systems. *In Volume of Abstracts of the 19th International Congress on Theoretical and Applied Mechanics (ICTAM 1996)*. 25th - 31st August **1996**, Kyoto, Japan. IUTAM (International Union of Theoretical and Applied Mechanics). Volume of Abstracts : pp. 272.
16. **Kundu, S.**; Kawata, S. and Iwata, Y.: Genetic algorithms for active vibration control system design. In Nonami, K. and Mizuno, T. (Eds). *Proceedings of the 3rd International Conference on Motion and Vibration Control. (3rd MOVIC)*. 1st - 6th September **1996**, Chiba, Japan. The Japan Society of Mechanical Engineers, Tokyo, Japan, pp. 122-127.
17. **Kundu, S.**; Kawata, S. and Watanabe, A. : Genetic learning as a fundamental basis for adaptive fuzzy systems, In *Proceeding of the 37th Joint Japan Automatic Control Conference*, 16-18 Nov, SICE, Japan, **1994**. pp. 331-332.
18. **Kundu, S.**; Kawata, S. and Watanabe, A. : Genetics based adaptive fuzzy rules for evolving control systems. In *Proceedings of 5th FAN Symposium '95*, September 30, **1995**, Tokyo. SOFT, (Japan Society of Fuzzy Theory and Systems) Japan. pp. 215-220.
19. **Kundu, S.**; Kawata, S. and Watanabe, A. Optimal control system design using a Pareto genetic algorithm. In *Proceedings of Joint Japan System and Information '95 Symposium*, November 17th - 18th, Toyama. SICE, Japan, **1995**. pp. 53-59.
20. **Kundu, S** and Kawata, S : A GA based state feedback design method using bicriterion performance index and tournament selection. *Proceedings of Fifth International Conference on Intelligent Systems. (formerly GWICS)* 19th - 21st June 1996, Reno, Nevada, U.S.A. International Society for Computers and Their Applications (ISCA). pp. 169-173, **1996**.
21. **Kundu, S** and Osyczka, A. : The effect of genetic algorithm selection mechanisms on multicriteria optimization using the distance method. *Proceedings of Fifth International Conference on Intelligent Systems. (formerly GWICS)* 19th - 21st June 1996, Reno, Nevada, U.S.A. International Society for Computers and Their Applications (ISCA). pp. 164-168, **1996**.
22. Osyczka, A. and **Kundu, S.** : A Genetic Algorithm Approach to Multicriteria Network Optimization Problems. *Proceedings of 20th International Conference on Computers & Industrial Engineering* 6th - 9th October, Kyongju, Korea. Sponsored by Korean Institute of Industrial Engineers and Computers & Industrial Engineering: An International Journal (USA). **1996**.
23. **Kundu, S.** : Optimization with Parallel Computing. In J.M.L.M. Palma et al. (Eds.) *Vector and Parallel Processing - VECPAR 2000*, LNCS 1981, pp. 221-229, 2001. © Springer-Verlag Berlin Heidelberg **2001**.
24. **Kundu, S.**, Seto, K. and Sugino, S. : GA Based Industrial Actuator Design for Optimum Control of Vibration in Flexible Structures. In Parmee, I. C. and Hajela, P. (Eds.) *Optimization in Industry*, pp. 267-276, 2002. © Springer-Verlag London Limited **2002**.

NO.	TITLE	JOURNAL ETC. VOLUME, NUMBER & PAGES	DATE	AUTHOR/S
25.	Discrete optimum design problems using genetic algorithms.	<i>Proceedings of Optimization in Industry - International Conference</i> , March 23-37, 1997, Palm Coast, Florida, USA. <i>Volume of abstracts Published by Engineering Foundation.</i>	Mar. 1997	<u>Kundu, S.</u> Osyczka, A.

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26.	A frame for experimentation with shape-grammars in architectural education.	<i>Proceedings of AVOCAAD - First International Conference on Added Value of Computer Aided Architectural Design.</i> Brussels, Belgium. Nys, K., Provoost, T., Verbeke, J. and Verleye, J. (Eds.) pp. 187-198	Apr. 1997	Hellgardt, M. <u>Kundu, S</u>
27.	Objective causality - An experiment with recognition and emergence in design practice.	<i>Proceedings of AVOCAAD - First International Conference on Added Value of Computer Aided Architectural Design.</i> Brussels, Belgium. Nys, K., Provoost, T., Verbeke, J. and Verleye, J. (Eds.) pp. 199-212	Apr. 1997	Hellgardt, M. Klinkenbijl, W. <u>Kundu, S.</u>
28.	A self organizing approach to optimization of structural plates using cellular automata.	<i>Proceedings of WCSMO-2 : Second world congress of structural and multidisciplinary optimization.</i> May 26-30, 1997. Zakopane, Poland. Gutkowski, W. and Mr, Z. (Eds.) Published by Institute of Fundamental Technological Research. Warsaw, Poland. Vol. 1, pp. 173-178.	May 1997	<u>Kundu, S.</u> Oda, J. Koishi, T.
29.	Optimization of structural control systems using genetic algorithms.	<i>Proceedings of WCSMO-2 : Second world congress of structural and multidisciplinary optimization.</i> May 26-30, 1997, Zakopane, Poland. Gutkowski, W. and Mr, Z. (Eds.) Published by Institute of Fundamental Technological Research. Warsaw, Poland. Vol. 1, pp. 375-380	May 1997	<u>Kundu, S.</u> Osyczka, A.
30.	Can a genetic algorithm outperform LQR ?	<i>Proceedings of the 2nd Asian Control Conference (2nd ASCC).</i> Seoul, Korea. 22-25 July, 1997. Vol 3, pp.123-126.	July 1997	<u>Kundu, S.</u> Kamagata, K. Seto, K. Kawata, S.
31.	Application of genetic algorithms to evolve a cellular automata for structural optimization.	<i>Proceedings of the International Symposium on Optimization and Innovative Design (OPID 97).</i> JSME Centennial Grand Congress by Japan Society of Mechanical Engineers. 28-30 July, 1997, Tokyo, Japan.	July 1997	<u>Kundu, S.</u> Oda, J. Koishi, T.

32.	Spatium - A system for the definition and design of shape grammars.	Yamakawa, H., Yoshimura, M., Morishita, S. and Arakawa, M. (Eds.) Paper #154, pp. 1-5 (CDROM) <i>CAAD futures 1997 - Proceedings of the 7th International Conference on Computer Aided Architectural Design Futures</i> . Munich, Germany, 4-6 Aug. 1997. Richard Junge (Ed). Kluwer Academic Publishers, Dordrecht, Netherlands. pp. 83-96.	Aug. 1997	Hellgardt, M. <u>Kundu, S.</u>
33.	Genetic learning of optimal rules for posture adaptation in variable geometry structures.	<i>Computer Aided Optimum Design of Structures - V. Hernandez, S. and Brebbia, C.A. (Eds.). Computational Mechanics Publications, Southampton UK. pp. 239-248</i>	Sept. 1997	Yamazaki, K. <u>Kundu, S.</u> Hamano, M.
34.	Solving vibration control problems using reduced order models for flexible structures - a genetic algorithm approach	Proceedings of DETC'97, 1997: ASME Design Engineering Technical Conferences, September 14-17, 1997, Sacramento, California. Published by American Society of Mechanical Engineers. #DETC97/VIB-3817 pp. 1-7(CDROM)	Sept. 1997	<u>Kundu, S.</u> Kamagata, K. Sugino, S. Minowa, T. Seto, K.