

Chih-Hsing Chu, Ph.D.

Professor, Department of Industrial Engineering
National Tsing Hua University
Hsinchu 30013, Taiwan
Phone: (886) 3-5742698, Fax: (886) 3-5722685
E-mail: chchu@ie.nthu.edu.tw
URL: <http://prl.ie.nthu.edu.tw>

Education

- 2000 Ph.D. Mechanical Engineering, University of California, Berkeley, USA
- 1992 M.S. Mechanical Engineering, National Taiwan University, Taipei, Taiwan
- 1990 B.S. Mechanical Engineering, National Taiwan University, Taipei, Taiwan

Professional Experience

- Since 2010/8 Professor, Department of Industrial Engineering
National Tsing Hua University, Hsinchu, Taiwan
- 2017/10~2018/9 Adjunct Researcher, National Center for High-Performance Computing, Hsinchu, Taiwan
- 2017/8~2018/7 Visiting Professor, Department of Mechanical and Aerospace Engineering (host: Dr. Barbara Linke), University of California, Davis, USA
- 2015/2~2017/7 Honorable Visiting Professor, School of Engineering
University of Liverpool, UK
- 2014/6~2014/8 Visiting Professor, Department of Mechanical Engineering (host: Dr. David Dornfeld)
University of California, Berkeley, USA
- 2009/8~2012/7 Director of International Affairs, College of Engineering
National Tsing Hua University, Hsinchu, Taiwan
- 2006/8~2010/7 Associate Professor, Department of Industrial Engineering
National Tsing Hua University, Hsinchu, Taiwan
- 2002/8~2006/7 Assistant Professor, Department of Industrial Engineering
National Tsing Hua University, Hsinchu, Taiwan
- 2005/8~2005/9 Invited Professor, CREDITS, Sungkunkwan University, Suwon, Korea
- 2002/12~2010/7 Senior Consultant, StandFord Corp., Taoyuan, Taiwan
- 2001/12~2002/7 Assistant Professor, Department of Industrial and Systems Engineering,
Virginia Tech, Blacksburg, USA
- 2000/6~2001/11 Web Applications Engineer, RedSpark-Autodesk, San Francisco, USA
- 1996/8~2000/5 Research Assistant, Laboratory for Manufacturing Automation,
University of California, Berkeley, USA
- 1994/10~1995/6 Research Assistant, National Taiwan University, Taipei, Taiwan
- 1993/9~1994/10 Visiting Scholar, WZL (Laboratory for Machine Tools and Production Engineering),
RWTH Aachen, Germany

Scholarly and Professional Honors

- Best Paper Award, 2022 ASME International Design Engineering Technical Conferences, St Louis, USA
- Excellent Industrial Collaboration Award (2021), National Tsing Hua University
- Outstanding Research Award (2018), Minister of Science and Technology, Taiwan
- Excellent Teaching Award (2017), College of Engineering, National Tsing Hua University
- Most Cited Article Award (2016), International Journal of Precision Engineering and Manufacturing
- Honorable Mentioned Paper Award, IEEE International Conference on Industrial Engineering and Engineering Management 2015, Singapore
- Most Cited Article Award (2015), International Journal of Precision Engineering and Manufacturing
- Best Paper Award, IEEE International Conference on Industrial Engineering and Engineering Management 2014, Malaysia.
- Research Award, Sayling Wen Foundation, 2012.
- Best Paper Award, 2012 ISPC: Interdisciplinary Design in Asia, Hsinchu, Taiwan.
- Excellent Industrial Collaboration Award (2012), College of Engineering, National Tsing Hua University
- Excellent Teaching Award (2011), College of Engineering, National Tsing Hua University
- Ta-You Wu Memorial Award (2007), National Science Council, Taiwan (equivalent to NSF CAREER Award; the first IE faculty member in the nation to win this award)
- Highly Recommended Paper Award, International Conference on Manufacturing Automation 2007, Singapore
- Young Faculty Research Award (2005), National Tsing Hua University
- Ph.D. Student Fellowship, Department of Mechanical Engineering, UC Berkeley, 1996-1997
- Member of the Phi-Tau-Phi Scholastic Honor Society, 1992

Professional Society Memberships

- Member, ASME (Society of the American Society of Mechanical Engineers), since 2001
- Senior Member, IEEE (Institute of Electrical and Electronics Engineers), since 2006
- Member, SME (Society of the Society of Manufacturing Engineers), since 2002

Journal Editorial Activities:

- Associate Editor, Journal of Engineering Design, since 2022/7.
- Associate Editor, Journal of Computing and Information Science in Engineering, since 2021/1.
- Editorial Board Member, International Journal of Precision Engineering and Manufacturing-Green Technology, since 2014/1.
- Editor in Chief, Journal of Industrial and Production Engineering, 2011/1~2020/7.
- Editor, International Journal of Precision Engineering and Manufacturing, 2011/1~2018/12.

- Editorial Board Member, International Journal of Computer Integrated Manufacturing, since 2014/1.
- Associate Editor, IEEE Transactions on Automation Science and Engineering, 2009/1~2013/12.
- Editor, Cogent Engineering, since 2015/1.
- Editorial Board Member, International Journal of Manufacturing Research, since 2013/1.
- Editorial Board Member, Journal of Integrated Design & Process Science, since 2012/1.
- Senior Editor, Journal of the Chinese Institute of Industrial Engineers, 2008/1~2010/12.
- Guest Editor, Special Issue “Extended Reality in Design and Manufacturing,” Journal of Computing and Information Science in Engineering, 2023.
- Guest Editor, Special Issue “Symbiotic Human-AI Partnership for Next Generation Factories,” Journal of Computing and Information Science in Engineering, 2022.
- Guest Editor, Special Issue “Augmented Reality in Smart Manufacturing,” Journal of Manufacturing Systems, 2021.
- Guest Editor, Special Issue “Scientific Advances in Product Experience Engineering,” Journal of Intelligent Manufacturing, 2014.
- Guest Editor, Special Issue “Depth Cameras Based Techniques and Applications in Design, Manufacturing and Services,” Journal of Manufacturing Systems, 2013.
- Guest Editor, Journal of Intelligent Manufacturing, Special Issue “Mass Customization and Personalization for Product and Service,” 2010.
- Guest Editor, Journal of Intelligent Manufacturing, Special Issue “Design Chain Management,” 2009.
- Guest Editor, Computers in Industry, Special Issue “Computer Techniques in Design and Manufacturing of Soft Products,” 2008.

Research Contributions

• Refereed Journal Papers

- J1. Chu, C.H.*, Zhou, Y., Zhang, J.H., & Tang, J. (2023) “Computational Approaches for Improving Machining Precision in Five-Axis Flank Milling of Spiral Bevel Gears,” *Computers & Industrial Engineering*, 108984.
- J2. Chu, C.H.*, Zhou, Y., Liu, E.M., & Tang, J. (2022) “Optimal tool path generation and cutter geometry design for five-axis CNC flank milling of spiral bevel gears,” *Journal of Computational Design and Engineering*, Vol. 9, No. 5, pp. 2024-2039.
- J3. Baroroh, D.K. and Chu, C.H.* (2022) "Human-centric production system simulation in mixed reality: An exemplary case of logistic facility design," *Journal of Manufacturing Systems*, Vol. 65, pp. 146-157.
- J4. Esfahani, E.T.*, He, B., Chu, C.H., Liu, Y., Rai, R., & Ameta, G. (2022) “Symbiotic Human-AI Partnership for Next Generation Factories,” *ASME Journal of Computing and Information Science in Engineering*, Vol. 22, No. 5, 050301.
- J5. Runji, J. M., Lee, Y. J., & Chu, C.H.* (2022). “Systematic Literature Review on Augmented Reality-Based Maintenance Applications in Manufacturing Centered on Operator Needs,” *International Journal of Precision Engineering and Manufacturing-Green Technology*, <https://doi.org/10.1007/s40684-022-00444-w>.
- J6. Runji, J. M., Lee, Y. J., & Chu, C.H.* (2022). User Requirements Analysis on Augmented Reality-Based Maintenance in Manufacturing. *ASME Journal of Computing and Information Science in Engineering*, Vol. 22, No. 5, 050901.

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- J7. Wang, S., Zhou, Y.*, Chu, C.H.*, Tang, J. (2022). "Novel kinematic and geometric views for improving tooth contact analysis of spatial gears," *Journal of Computational Design and Engineering*, Vol. 9, No. 3, pp. 1076–1096
- J8. Chu, C.H.*, Chen, Y.A., Huang, Y.Y., & Lee, Y.J. (2022). "A Comparative Study of Virtual Footwear Try-On Applications in Virtual and Augmented Reality," *Journal of Computing and Information Science in Engineering*, Vol. 22, No. 4, 041004.
- J9. Chu, C.H.*, Wang, L., Liu, S., Zhang, Y., & Menozzi, M. (2021). "Augmented reality in smart manufacturing: Enabling collaboration between humans and artificial intelligence," *Journal of Manufacturing Systems*, 61, 656-659.
- J10. Chu, C.H.*, & Ko, C. H. (2021). "An experimental study on augmented reality assisted manual assembly with occluded components," *Journal of Manufacturing Systems*, Vol. 61, pp. 685-695.
- J11. Baroroh, D.K., Chu, C.H.*, & Wang, L. (2021). "Systematic literature review on augmented reality in smart manufacturing: Collaboration between human and computational intelligence," *Journal of Manufacturing Systems*, Vol. 61, pp. 696-711.
- J12. Chu, C.H.*, Chen, H.Y., & Chang, C.H. (2020) "Continuity-Preserving Tool Path Generation for Minimizing Machining Errors in Five-Axis CNC Flank Milling of Ruled Surfaces," *Journal of Manufacturing Systems*, Vol. 55, pp. 171-178.
- J13. Kamath, A.K., Linke, B.*, and Chu, C.H. (2020) "Enabling Advanced Process Control for Manual Grinding Operations," *Smart and Sustainable Manufacturing Systems*, Vol. 4, No. 2, pp. 210-230.
- J14. Luh, Y.P., Huang, L.C., Lu, H.J., and Chu, C.H.* (2020) "A Smart Manufacturing Solution for Multi-Axis Dispenser Motion Planning in Mixed Production of Shoe Soles," *International Journal of Precision Engineering and Manufacturing: Green Technology*, Vol. 7, No. 3, pp. 769–779.
- J15. Chu, C.H.*, Chang, W.C., and Lin, Y.I (2020) "An Exploratory Study on Computer-Aided Affective Product Design Based on Crowdsourcing," *Journal of Ambient Intelligence and Humanized Computing*, Vol. 11, No. 11, pp. 5115-5127.
- J16. Chu, C.H.*, Liao, C.J., Lin, S.C. (2020) "Comparing Augmented Reality-Assisted Assembly Functions—A Case Study on Dougong Structure," *Applied Sciences*, Vol. 10, No. 10, 3383.
- J17. Chu, C.H., Wang, I.J., Sun, J.R., and Liu, C.H.* (2020) "Customized Designs of Short Thumb Orthoses using 3D Hand Parametric Models," *Assistive Technology*, Vol. 7, pp. 1-8.
- J18. Chu, C.H.*, Liu, Y.W., Li, P.C., Huang, L.C. and Luh, Y.P. (2020) "Programming by Demonstration in Augmented Reality for the Motion Planning of a Three-Axis CNC Dispenser," *International Journal of Precision Engineering and Manufacturing: Green Technology*, Vol. 7, No. 5, pp. 987-995.
- J19. Chu, C.H.*, Cheng, C.H., Wu, H.S., and Kuo, C.C. (2019) "A Cloud Service Framework for Virtual Try-on of Footwear in Augmented Reality," *ASME Journal of Computing and Information Science in Engineering*, Vol. 19, No. 2, pp. 21002.
- J20. Yi, J., Li, X.*, Chu, C. H., & Gao, L. (2019). "Parallel chaotic local search enhanced harmony search algorithm for engineering design optimization," *Journal of Intelligent Manufacturing*, Vol. 30, No. 1, pp. 405-428
- J21. Hong, I., Su, C.P.*, Chu, C.H., and Yen, C.Y. (2018) "Decentralized decision framework to coordinate product design and supply chain decisions: Evaluating tradeoffs between cost and carbon emission," *Journal of Cleaner Production*, Vol. 204, pp. 107-116.
- J22. Yi, J., Chu, C.H.*, Kuo, C.L., Li, X., and Gao, L. (2018) "Optimized tool path planning for five-axis flank milling of ruled surfaces using geometric decomposition strategy and multi-population harmony search algorithm," *Applied Soft Computing*, Vol. 73, pp. 547-561.
- J23. Chu, C.H.* and Wang, I.J. (2018) "Mass Customized Design of Cosmetic Masks Using Three-Dimensional Parametric Human Face Models Constructed from Anthropometric Data," *Journal of Computing and Information Science in Engineering*, Vol. 18, No. 3, pp. 34501-34512.
- J24. Chu, C.H.*, Wang, I.J., Wang, J.B., and Luh, Y.P. (2017) "3D Parametric Human Face Modeling for Personalized Product Design: Eyeglasses Frame Design Case," *Advanced Engineering Informatics*, Vol. 32, pp. 202-223.
- J25. Xu, K., Wang, J., Chu, C.H., and Tang, K.* (2017) "Cutting Force and Machine Kinematics Constrained Cutter
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- Location Planning for Five-axis Flank Milling of Ruled Surfaces,” *Journal of Computational Design and Engineering*, Vol. 4, No. 3, pp. 203-217.
- J26. Jiao, J.*, Zhou, F., and Chu, C.H. (2017) “Decision Theoretic Modelling of Affective and Cognitive Needs for Product Experience Engineering: Key Research Issues and a Conceptual Framework,” *Journal of Intelligent Manufacturing*, Vol. 28, No. 7, pp. 1755-1767.
- J27. Chu, C.H.*, Lo, C.H. and Cheng, H.C. (2017) “Cognitive Shape Similarity Assessment for 3D Part Search,” *Journal of Intelligent Manufacturing*, Vol. 28, No. 7, pp 1679-1694.
- J28. Lo, C.H., Chu, C.H.*, Yanagisawa, H., and Jiao, J. (2017) “Scientific Advances in Product Experience Engineering,” *Journal of Intelligent Manufacturing*, Vol. 28, No. 7, pp 1581-1584.
- J29. Yi, J., Li, X.*, Chu, C.H., and Gao, L. (2016) “Parallel Chaotic Local Search Enhanced Harmony Search Algorithm for Engineering Design Optimization,” in press (accepted in August 2016), *Journal of Intelligent Manufacturing*.
- J30. Chu, C.H.* and Kuo, C.L. (2016) “Iterative Optimization of Tool Path Planning in Five-Axis Flank Milling of Ruled Surfaces by Integrating Sampling Techniques,” *International Journal of Advanced Manufacturing Technology*, Vol. 87, No. 5, pp. 2363-2374.
- J31. Lin, S.C., Persada, S.F., Nadlifatin, R., Tsai, H.Y., and Chu, C.H.* (2015) “Exploring the Influential Factors of Manufacturers’ Initial Intention in Applying for the Green Mark Eco-Label in Taiwan,” *International Journal of Precision Engineering and Manufacturing: Green Technology*, Vol. 2, No. 4, pp. 359-364.
- J32. Yang, Lu, Chu, C.H.*, Fu, Y.C., Xu, J.H., and Liu, Y.T. (2015) “CFRP Grinding Wheels for High Speed and Ultra-High Speed Grinding: A Review of Current Technologies and Research Strategies,” *International Journal of Precision Engineering and Manufacturing*, Vol. 16, No. 12, pp. 2599-2606.
- J33. Chu, C.H.*, Hsieh, H.T., Lee, C.H., and Yan, C. (2015) “Spline Constrained Tool Path Planning in Five-Axis Flank Machining of Ruled Surface,” Vol. 80, No. 9, pp. 2097-2104, *International Journal of Advanced Manufacturing Technology*.
- J34. Chu, C.H.*, Kuo, C.L., Gao, L., and Li, Y. (2015) “Electromagnetism-Like Algorithms for Optimized Tool Path Planning in 5-Axis Flank Machining,” Vol. 84, pp. 70-78, *Computers and Industrial Engineering*.
- J35. Huang, S.H., Yang, C.K., Tseng, C.Y., and Chu, C.H.* (2015) “Design Customization of Respiratory Mask based on 3D Face Anthropometric Data,” Vol. 16, No. 3, pp. 1-8, *International Journal of Precision Engineering and Manufacturing*.
- J36. Kuo, T.C.*, Huang, M.L., Hsu, C.W., Lin, C.J., Hsieh, C.C., and Chu, C.H. (2015) “Application of data quality indicator of carbon footprint and water footprint,” Vol. 2, No. 1, pp. 43-50, *International Journal of Precision Engineering and Manufacturing: Green Technology*.
- J37. Lo, C.H., Chu, C.H.*, and Huang, S.H. (2015) “Evaluating the Effect of Interactions between Appearance-Related Product Designs and Facial Characteristics on Social Affectivity,” Vol. 45, pp. 35-47, *International Journal of Industrial Ergonomics*.
- J38. Wang, C.C.L., Chu, C.H., Wang, L.*, and Ramani, K. (2014) “Depth Cameras based Techniques and Applications in Design, Manufacturing and Services,” Vol. 33, No. 4, pp. 675-676, *Journal of Manufacturing Systems*.
- J39. Yang, Y.I., Yang, C.K., and Chu, C.H.* (2014) “A Virtual Try-on System in Augmented Reality Using RGB-D Cameras for Footwear Personalization,” Vol. 33, No. 4, pp. 690-698, *Journal of Manufacturing Systems*.
- J40. Kuo, C.L., Su, C.P., Chu, C.H.*, and Miao, H.Y. (2014) “A Statistical Framework to Characterize Nanotube Buckytube Manufacturing Process,” *International Journal of Precision Engineering and Manufacturing*, Vol. 15, No. 8, pp. 1-8.
- J41. Lin, Y.I., Tien, K.W., and C.H.* (2014) “A Multi-Target Hierarchical Negotiation Mechanism for Distributed Design,” *IEEE Transactions on Automation Science and Engineering*, Vol. 11, No. 3, pp. 881-890.
- J42. Lo, C.H. and Chu, C.H.* (2014) “An Investigation of the Social-Affective Effects Invoked by Appearance-Related Products,” Vol. 24, No. 1, pp. 71-85, *Human Factors and Ergonomics in Manufacturing & Service Industries*.
- J43. Wu, P.H. and Chu, C.H.* (2012) “Improved Curve Morphing Based on Discrete Dynamic Programming,” accepted (2012/6), *International Journal of Innovative Computing Information and Control*.

- J44. Hsieh, S.T., Tsai, Y.C., and Chu, C.H.* (2013) "Multi-Pass Progressive Tool Path Planning in Five-Axis Flank Milling by Particle Swarm Optimization," Vol. 26, No. 10, pp. 977-987, *International Journal of Computer Integrated Manufacturing*.
- J45. Smith, S.*, G. Smith, Jiao, J., and Chu, C.H. (2013) "Mass Customization in the Product Life Cycle," *Journal of Intelligent Manufacturing*, Vol. 24, No. 5, pp. 877-885.
- J46. Luh, Y.P., Wang, J.B., Chang, J.W., Chang, Y.Y., Chu, C.H.* (2013) "Augmented Reality based Mass Customization of Shoe Design," *Journal of Intelligent Manufacturing*, Vol. 24, No. 5, pp. 905-917.
- J47. Chu, C.H.* and Cheng, K.C. (2013) "Precise 5-Axis Grooving of Tire Mold by Optimization of Surface Developability," *International Journal of Precision Engineering and Manufacturing*, Vol. 14, No. 10, pp. 1-6.
- J48. Chen, J.T. and Chu, C.H.* (2013) "Geometric Design of Uniform Developable B-Spline Surfaces: Constraints and Degrees of Freedom," *Journal of Industrial and Production Engineering*, Vol. 30, No. 4, pp. 216-222.
- J49. Kuo, T.C.* and Chu, C.H. (2013) "Risk Management of Hazardous Substances in the Green Supply Chain," *International Journal of Precision Engineering and Manufacturing*, Vol. 14, No. 6, pp. 1057-1064.
- J50. Lin, Y.I., Chou, Y.W., Shiau, J.Y., and Chu, C.H.* (2013) "Multi-Agent Negotiation based on Price Schedules Algorithm for Distributed Collaborative Design," *Journal of Intelligent Manufacturing*, Vol. 24, No. 3, pp. 545-557.
- J51. Chu, C.H.*, Su, C.P., Li, W.D., and Jiao, J. (2013) "Design Chain Management: Bridging the Gap," Vol. 24, No. 3, pp. 541-544, *Journal of Intelligent Manufacturing*.
- J52. Hsieh, S.T. and Chu, C.H.* (2013) "Improving Tool Path Planning in 5-Axis Flank Milling of Ruled Surfaces using Advanced PSO Algorithms," *Robotics & Computer Integrated Manufacturing*, Vol. 29, No. 3, pp. 3-11.
- J53. Lin, C.W. and Chu, C.H.* (2013) "Dynamic Models and Design of Spindle-Bearing Systems of Machine Tools: A Review," *International Journal of Precision Engineering and Manufacturing*, Vol. 14, No. 3, pp. 513-521.
- J54. Chan, Y.H., Wu, P.H., and Chu, C.H.* (2012) "Optimized Product Data Transmission in LOD-based Collaborative Design using P2P CAD Streaming," *Journal of Intelligent Manufacturing*, Vol. 23, No. 5, pp. 1559-1571.
- J55. Chu, C.H.* and Hsieh, S.T. (2012) "Generation of Reciprocating Tool Motion in 5-Axis Flank Milling based on PSO," *Journal of Intelligent Manufacturing*, Vol. 23, No. 5, pp. 1501-1509.
- J56. Chu, C.H.*, Su, C.P., and Chen, Y.T. (2012) "A Concurrent Approach to Reducing Environmental Impact of Product Development in the System Design Stage," *IEEE Transactions on Automation Science and Engineering*, Vol. 9, No. 3, pp. 482-495.
- J57. Lin, Y.I., Tien, K.W., and Chu, C.H.* (2012) "Multi-Agent Negotiation based on Multi-Resource Price Schedules Decomposition for Distributed Design," *Computers in Industry*, Vol. 63, No. 6, pp. 597-609.
- J58. Su, C.P.* and Chu, C.H. (2012) "A Decision Support System to Estimate the Carbon Emission and Cost of Product Designs," *International Journal of Precision Engineering and Manufacturing*, Vol. 13, No. 7, pp. 1037-1045.
- J59. Chiu, M.C. and Chu, C.H.* (2012) "A Review on Integrated Sustainable Product Design from Life Cycle Perspectives," *International Journal of Precision Engineering and Manufacturing*, Vol. 13, No. 7, pp. 1-14.
- J60. Chu, C.H.*, Huang, W.N., and Li, Y.W. (2012) "An integrated framework of Tool Path Planning in 5-Axis Machining of Centrifugal Impeller with Split Blades," *Journal of Intelligent Manufacturing*, Vol. 23, pp. 687-698.
- J61. Chu, C.H.*, Wu, P.H., and Lei, W.T. (2012) "Tool Path Planning for 5-Axis Flank Milling of Ruled Surfaces Considering CNC Linear Interpolation," *Journal of Intelligent Manufacturing*, Vol. 23, pp. 471-480.
- J62. Wu, P.H., Hsieh, S.T., and Chu, C.H.* (2012) "Reducing Machining Error in 5-Axis Flank Milling with Simultaneous Perturbation Stochastic Approximation Method," *International Journal of Innovative Computing Information and Control*, Vol. 8, No. 5, pp. 1-11.
- J63. Huang, S.H., Yang, Y.I., and Chu, C.H.* (2012) "Human-Centric Design Personalization of 3D Glasses Frame in Markerless Augmented Reality," *Advanced Engineering Informatics*, Vol. 16, pp. 35-45.
- J64. Hsieh, S.T. and Chu, C.H.* (2012) "Reducing Machining Error in 5-Axis Flank Milling of Ruled Surfaces with Improved PSO," *International Journal of Precision Engineering and Manufacturing*, Vol. 13, No. 1, pp. 1-8.

- J65. Hsieh, S.T and Chu, C.H.* (2011) "PSO-based Tool Path Planning for 5-Axis Flank Milling Accelerated by GPU," *International Journal of Computer Integrated Manufacturing*, Vol. 24, No. 7, pp. 676-687.
- J66. Luh, Y.P., Pan, C.C., and Chu, C.H.* (2011) "Deployment of Distributed PLM System in Collaborative Product Development," *International Journal of Computer Integrated Manufacturing*, Vol. 24, No. 5, pp. 471-483.
- J67. Cheng, H.C., Lo, C.H., Chu, C.H.*, and Kim, Y.S. (2011) "Similarity Assessment based on Integration of D2 Shape Distribution and Negative Feature Decomposition for 3D Mechanical Parts," *Computers in Industry*, Vol. 62, pp. 269-280.
- J68. Chu, C.H.*, Wang, C.C.L., Tsai, C.R., and Li, Y.W., (2011) "Strip Approximation with Bézier Patches in Conical Form for Design and Manufacturing of Developable Materials," *International Journal of Computer Integrated Manufacturing*, Vol. 24, No. 3, pp. 269-284.
- J69. Chu, C.H.*, Tien, K.W., Lee, C.T., and Ting, C.J. (2011) "Efficient Tool Path Planning in 5-Axis Milling of Ruled Surfaces using Ant Colony System Algorithms," *International Journal of Production Research*, Vol. 49, No. 6, pp. 1557-1574.
- J70. Lo, C.H., Tseng, K.C., and Chu, C.H.* (2010) "One Step QFD Based 3D Morphological Charts for Concept Generation of Product Variant Design," *Expert System with Applications*, Vol. 37, pp. 7351-7363.
- J71. Wang, C.C.L.* and Chu, C.H. (2010) "Soft Products Development," *Computers in Industry*, Vol. 61, pp. 511-512.
- J72. Lo, C.H.*, Chu, C.H., Debattista, K., and Chalmers, A. (2010) "An Investigation of Efficient Rendering of Ray Traced Stereoscopic Images," *The Visual Computer*, Vol. 26, pp. 97-107.
- J73. Chu, C.H., Tsai, Y.T., Wang, C.C.L.*, and Kwok, T.H. (2010) "Exemplar-Based Statistical Model for Semantic Parametric Design of Human Body," *Computers in Industry*, Vol. 61, No. 5, pp. 541-549.
- J74. Luh, Y.P., Chu, C.H.*, and Pan, C.C. (2010) "Management of Green Product Design using Generic Modularized Product Architecture in PDM," *Computers in Industry*, Vol. 61, pp. 223-234. (SCI)
- J75. Cheng, H.C. and Chu, C.H.* (2010) "3D Similar Part Search through CAD/PDM Integration," *Journal of Advanced Engineering*, Vol. 5, No. 1, pp. 15-20.
- J76. Chu, C.H.*, Wu, P.H., and Yuan, G.X. (2009) "Online Parametric Configuration of 3D Product based on Triangulation Model," *Journal of Engineering Manufacture*, Vol. 223, No. 3, pp. 231-246.
- J77. Chu, C.H.*, Wu, P.H., Hsu, Y.C., and Sung, M.C., (2009) "Multi-Agent Collaborative 3D Design with Multiple Levels of Detail," *Robotics & Computer Integrated Manufacturing*, Vol. 25, pp. 334-347.
- J78. Tsai, W.L., Lo, C.H., and Chu, C.H.* (2009) "Designing Developable Surface with Haptic Force Feedback," *Journal of Engineering Manufacture*, Vol. 223, No. 2, pp. 163-168.
- J79. Lo, C.H. and Chu, C.H.* (2009) "Experimental Study for Computer Aided Affective Product Styling," Vol. 6, No. 4, pp. 471-482, *Computer-Aided Design and Applications*.
- J80. Chu, C.H.*, Cheng, H.C., Wang, E., and Kim, Y.S., (2009) "ANN-based 3D Part Search with Different LOD in Negative Feature Decomposition," *Expert Systems with Applications*, Vol. 36, pp. 10905-10913.
- J81. Chu, C.H.*, Luh, Y.P., Li, T.C, and Chen, H. (2009) "Economical Green Product Design based on Computer-Aided Product Structure Variation", *Computers in Industry*, Vol. 60, No. 7, pp. 485-500.
- J82. Lo, C.H. and Chu, C.H.* (2009) "Affective Modelling: Profiling Geometrical Models with Human Emotional Responses," *Computer Graphics Forum*, Vol. 28, No. 7, pp. 1811-1820.
- J83. Chu, C.H.*, Wang, C.C.L., and Tsai, C.R., (2008), "Computer Aided Geometric Design of Strip using Developable Bézier Patches," *Computers in Industry*, Vol. 59, pp. 601-610.
- J84. Chu, C.H.*, Huang, W.N., and Hsu, Y.Y. (2008) "Machining Accuracy Control in Five-Axis Flank Milling of Ruled Surface," *International Journal of Machine Tools and Manufacture*, Vol. 48, pp. 914-921.
- J85. Wu, P.H. and Chu, C.H.* (2008) "Optimized Tool Path Generation in 5-Axis Flank Milling using Dynamic Programming," *International Journal of Machine Tools and Manufacture*, Vol. 48, pp. 914-921.
- J86. Tsai, W.L., Wang, C.C.L.*, Chu, C.H., and Tang, K. (2008) "Optimal Quadrangulation for Flank Milling of Strip," *Computer-Aided Design and Applications*, Vol. 5, No. 1-4, pp. 307-315.

- J87. Wu, P.H., Li, Y.W., and Chu, C.H.* (2008) "Tool Path Planning for 5-Axis Flank Milling Based on Dynamic Programming Techniques," *Lecture Notes in Computer Science*, Vol. 4975, pp. 570-577.
- J88. Chu, C.H.*, Chan, Y.H., and Wu, P.H. (2008) "3D Streaming based on Multi-LOD Models for Networked Collaborative Design," *Computers in Industry*, Vol. 59, pp. 863-872.
- J89. Chu, C.H.*, Wang, C.C.L., and Tsai, C.R., (2007) "Strip Approximation Using Developable Bézier Patches," *Computer-Aided Design and Applications*, Vol. 4, No. 6, pp. 807-816.
- J90. Chu, C.H.* and Chen, J.T. (2007) "Characterizing Design DOF for Composite Developable Bézier Surfaces and Their Applications in Design and Manufacturing," *Robotics & CIM*, Vol. 23, No. 1, 116-125.
- J91. Cheng, H.C., Chu, C.H.*, Wang, E., and Kim, Y.S. (2007) "3D Part Similarity Comparison based on Levels of Detail in Negative Feature Decomposition Using Artificial Neural Network," *Computer-Aided Design and Applications*, Vol. 4, No. 5, pp. 619-628.
- J92. Chu, C.H.*, Song, M.C., and Luo, V.C. (2006), "Computer Aided Parametric Design for 3D Tire Mold Production," *Computers in Industry*, Vol. 57, No. 1, pp. 11-25.
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- C4. Chu, C.H. (2022) "Extended Reality (XR) Applications in Industry 5.0: Human Centric Perspective," International Symposium on Precision Engineering and Sustainable Manufacturing, International Symposium on Precision Engineering and Sustainable Manufacturing (hybrid), Jeju, Korea.
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- C11. Chu, C.H.*, Liu, J.S., and Wang, I.J. (2019) "Customized Thumb Orthosis Designs using Parametric 3D Hand Models," ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, Anaheim.
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- C22. Li, P.C. and Chu, C.H.* (2016) "Augmented Reality based Robot Path Planning for Programming by Demonstration," 2016 Asia Design Engineering Workshop (A-DEWS), Osaka, Japan.
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- C31. Tseng, C.Y., Wang, I.J., and Chu, C.H.* (2015) "Design Personalization using 3D Parametric Models: An Example of the Eyeglasses Frame Design," ASME CIE/DETC Conferences, Boston, USA.
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