

表8-2 國立中央大學資訊工程學系教師研究領域、代表論文與教學科目

教師	研究領域	代表論文	教學科目
曾黎明 教授	網路及分散式系統	Li-Ming Tseng, Finding Nearest Neighbors in Replication-Aware CDN-P2P Architecture,2005	計算機網路、新世代網際網路、作業系統、網際網路、分散式系統、網路程式設計、虛擬機系統與應用
范國清 教授	圖形識別、電腦視覺、影像處理	* Y.Y. Lu, C.C. Han, M.C. Lu, and Kuo-Chin Fan (2011), "A vision-based system for the prevention of car collisions at night," Journal of Machine Vision and Applications, Vol. 22, No. 1, pp 117-127, January 2011 (SCI). * Ying-Nong Chen, Chin-Chuan Han, Cheng-Tzu Wang, and Kuo-Chin Fan (2011), "Face recognition using nearest feature space embedding," accepted and to appear in IEEE Transactions on Pattern Analysis and Machine Intelligence ,2011 (SCI).	圖形識別、數位系統導論
曾定章 教授	影像處理、虛擬實境、電腦視覺	*Chang-Min Chou ,Din-Chang Tseng ,Affine-Transformation-Invariant Public Fragile Watermarking for 3D Model Authentication, March/April 2009 Published by the IEEE Computer Society *DIN-CHANG TSENG,I-LING CHUNG, Chang-Min Chou, DEFECT CLASSIFICATION FOR LCD COLOR FILTERS USING NEURAL-NETWORK DECISION TREE CLASSIFIER	影像處理、線性代數、虛擬實境、工程數學
何錦文 教授	演算法、生物計算、平行與分散處理	* Chin-Wen Ho and R. C. T. Lee "Efficient Parallel Algorithms for Finding Maximal Cliques, Clique Trees, and Minimum Coloring on	高等演算法、演算法、程式設計專題、機率與統計、進階程式設計專

		Chordal Graphs," Information Processing Letters * <u>Chin-Wen Ho</u> and R. C. T. Lee "A Parallel Algorithm for Solving Sparse Triangular Systems," <i>IEEE Transactions on Computers</i> ,	題、計算理論
李允中 教授	軟體工程、服務導向軟體工程、模糊理論、智慧型代理人	* <u>J. Lee</u> , S.-J. Lee, H.-M. Chen, and K.-H. Hsu. Itinerary-based Mobile Agent as a Basis for Distributed OSGi Services. <i>IEEE Transactions on Computers</i> . (SCI) (to appear, 2012) * <u>J. Lee</u> and Y. C. Cheng. Change the Face of Software Engineering Education: a Field Report from Taiwan. <i>Information and Software Technology</i> , 53(1): 51-57, Jan 2011. (SCI)	軟體工程、軟體程序管理、軟體流程管理
陳國棟 教授	行動學習資訊系統、智慧型學習網站、資料庫系統	* Chih-Kai Chang, <b>Gwo-dong Chen</b> , Chin-Yeh Wang (2011). Statistical Model for Predicting Roles and Effects in Learning Community. <i>Behaviour &amp; Information Technology</i> * <b>Gwo-Dong Chen</b> , Jih-Hsien Lee, Chin-Yeh Wang, Po-Yao Chao, Liang-Yi Li, & Tzung-Yi Lee (2011). "An Empathic Avatar in a Computer-Aided Learning Program to Encourage and Persuade Learners", <i>Educational Technology &amp; Society</i> . (SSCI)	人機互動設計、原型與評估、機器學習與因果推論、計算機概論、機器學習 Advanced、C/C++程式設計、
洪炯宗 教授	資料庫系統設計、資料倉儲、遺傳演算法、生物資訊學	* Tzu-Hao Chang, Hsien-Da Huang, Tzu-Neng Chuang, Dray-Ming Shien and Jorng-Tzong Horng, "RNAMST: efficient and flexible approach for identifying RNA structural homologs", <i>Nucleic Acids Research</i> 2006 34(Web Server issue) * Feng-Mao Lin, Hsien-Da Huang,	資料結構、組合語言與系統程式、計算機概論、生物資訊與計算分子生物學、計算機結構、資料庫系統

		Yu-Chung Chang, Ann-Ping Tsou, Pak-Leong Chan, Li-Cheng Wu, Meng-Feng Tsai, and Jorng-Tzong Horng, "Database to Dynamically Aid Probe Design for Virus Identification", IEEE Transactions on Information Technology in Biomedicine, Vol. 10, No.00, 2006.	
黃興燦 教授	多處理機系統、操作系統、分散計算理論	* Huang, S. T., 1993, Leader Election in Uniform Rings, ACM Trans. on Programming Language and Systems, Vol. 15, No. 3, July 1993, pp. 563-573. *Huang, J.Y., Tsai. C.H., <u>Huang, S.T.</u> , and Wei, S.S., Next Generation of GPS Navigation System, accepted and to appear in Communication of ACM.	人因工程、容錯計算、自我穩定、組合語言與系統程式
陳振炎 教授	代理人網路軟體、快捷方法、物件導向方法、軟體工程環境	* Chih-Hao Liu and Jason Jen-Yen Chen, Using Ontology-based BDI Agent to Dynamically Customize Workflow and Bind Semantic Web Service, <i>Journal of Software</i> , Vol 7, No 4 (2012), 884-894, Apr 2012 * C. H. Liu, Y. F. Lin and Jason J. Y. Chen ,Using Agent to Coordinate Web Services, <i>IJCSIS</i> , June 2009, Vol. 2	智慧型代理人軟體工程、敏捷方法、資料結構、編譯器、軟體工程環境、高等軟體工程
顏嵩銘 教授	IC 卡安全之研究 (IC 卡物理攻擊法)、公開金鑰密碼系統、資訊與通訊安全、快速計算機算術、計算機演算法、數位電路設	* M. Joye and S.M. Yen, "Optimal Left-to-right Binary Signed-Digit Recoding," IEEE Trans. on Computers, Vol. 49, No. 7, pp. 740-748, July 2000. * S.M. Yen, S.J. Kim, S.G. Lim, and S.J. Moon, "RSA Speedup with Chinese Remainder Theorem Immune against Hardware Fault Cryptanalysis," IEEE Trans. on Computers, Vol. 52,	網路安全、計算機組織、網路安全專論、資訊安全概論

<p><b>蘇木春 教授</b></p>	<p>計 類神經網路、 模糊系統、計 算型智慧、 人機介面、圖樣 識別、影像處理</p>	<p>No. 4, pp. 461-472, April 2003.  * M. C. Su*, C. H. Chou、2001、A Modified Version of the K-Means Algorithm with a Distance Based on Cluster Symmetry、<i>IEEE Trans. on Pattern Analysis and Machine Intelligence</i>、vol. 23, no. 6、pp. 674-680、IF=4.378、Times cited: 220(Google)\106(SCI)  * M. C. Su*, H. T. Chang、2000、 Fast self-organizing feature map algorithm、<i>IEEE Trans. on Neural Networks</i>、vol. 13, no. 3、pp. 721-733、IF=1.972、Times cited: 99(Google)\55(SCI)</p>	<p>類神經網路、計算 型智慧、數位訊號 處理及其應用、群 聚分析、群體智 慧、數位信號處理</p>
<p><b>周立德 教授</b></p>	<p>寬頻高速網路、 無線網路、網路 管理</p>	<p>* Li-Der Chou, Mobile Social Network Services for Families With Children With Developmental Disabilities, <i>IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE</i>  * Li-Der Chou · Jyun-Yan Yang, Intersection-Based Routing Protocol for VANETs, Department of Computer Science and Information Engineering, National Central University</p>	<p>網際網路、網路管 理、寬頻網路接取 技術、計算機網 路、網路路由技 術、作業系統、網 路程式設計、網路 內容檢測技術與實 驗、P2P 應用服務、 異質多網多媒體服 務</p>
<p><b>吳曉光 教授</b></p>	<p>無線通訊網路、 寬頻網路、電子 商務、嵌入式系 統</p>	<p>* Eric Hsiao-kuang Wu, Meizhen Chen, "JTCP, Jitter-based for Wireless Networks", <i>IEEE Journal of Selected Area Communications (JSAC)</i> Vol. 22, No. 4, May 2004, pp. 757-766. (SCI)  * Chiang-chen Hu, Eric Hsiao-kuang Wu, and Gen-Huey Chen, "Bandwidth Satisfied Multicast tree in MANETs", in <i>IEEE Transaction on Mobile Computing</i>, vol. 7, no. 6, pp. 712-723, Feb., 2008. (SCI)</p>	<p>無線多媒體系 統電腦網路效 能分析:排隊 理論、離散數 學、機率與統 計</p>

<p>楊鎮華 教授</p>	<p>知識系統、Web 2.0、智慧型網路、情境式行動多媒體</p>	<p>*Yang, S.J.H.*, (2006). Context aware ubiquitous learning environments for peer-to-peer collaborative learning. <i>Educational Technology and Society</i>, 9(1), 188-201, (SSCI, IF: 0.469, ISI 引用次數: 59 次; 為 2006 年 SSCI 期刊 top 1%被引用的論文)</p> <p>* Yang, S.J.H.*, Chen, I.Y.L. (2008). A social network-based system for supporting interactive collaboration in knowledge sharing over peer-to-peer network. <i>International Journal of Human-Computer Studies</i>, 66(1), 36-50, (SSCI, IF: 1.769, ISI 引用: 23)</p>	<p>無所不在之情境感知系統、網路程式應用、智慧型網路服務工程、知識工程與管理、知識工程概論、XML 網際網路應用與服務、智慧型網際服務與數位學習、邏輯與知識運算、創意學習</p>
<p>梁德容 教授</p>	<p>分散式系統、容錯計算、審計安全、物件導向</p>	<p>* Fengyi Lin, Deron Liang, and Wing-Sang Chu, "The Role of Non-financial Features Related to Corporate Governance in Business Crisis Prediction", <i>Journal of Marine Science and Technology</i>, vol. 18, no. 4, pp. 504-513, 2010. (SCI)</p>	<p>網路程式設計、物件導向軟體工程、元件式軟體工程</p>
<p>張嘉惠 副教授</p>	<p>網際網路、資料萃取、資料探勘</p>	<p>* C.-H. Chang, M. Kayed, M. R. Girgis, K. Shaalan: A Survey of Web Information Extraction Systems, <i>IEEE TKDE (SCI, EI)</i>, Vol. 18, No. 10, pp. 1411-1428, Oct. 2006.</p> <p>T.-K. Fan and C.-H. * Chang: Sentiment Oriented Contexture Advertising. <i>Journal of Knowledge and Information System</i>. Vol. 23, No. 3, pp. 321-344, 2010.</p>	<p>Web2.0 技術及應用、最佳化理論、資料探勘、組合語言與系統程式、網路資訊擷取方法、線性代數、全球資訊網資訊處理技術</p>
<p>江振瑞 副教授</p>	<p>行動計算、分散式計算、同儕計算、隨處計算、無線感測網路、行動隨意網路</p>	<p>* Shun-Yun Hu, Jehn-Ruey Jiang and Bing-Yu Chen, "Peer-to-Peer 3D Streaming," <i>IEEE Internet Computing</i>, Vol. 14, No. 2, pp. 54-61, March/April 2010. (EI, SCI)</p>	<p>隨處計算、同儕計算、演算法、程式語言、程式設計專題同儕網路、普適計算、P2P 應用服</p>

	通訊協定	* Chin-Ling Chen, Yu-Chung Huang and Jehn-Ruey Jiang, "A secure ownership transfer protocol using EPCglobal Gen-2 RFID," Telecommunication Systems, to appear. (EI, SCI)	務
陳慶瀚 副教授	嵌入式系統、生物辨識、計算智慧	*Ching-Yi Chen, Ching-Han Chen*, and Zhi-Xu Dai, "An Evolutionary Computation Approach for Lane Detection and Tracking", Advanced Science Letters, Vol. 5, 1-6, 2012. *Tun-Kai Yao, Ching-Han Chen*, and Chia-Ming Kuo, "A high-efficient multimedia cipher using a filter chaos-based pseudo random number generator", Int. J. Signal and Imaging Systems Engineering, Vol. 4, No. 2, 2011, pp.71-78.	嵌入式軟體、嵌入式系統設計、數位系統導論、計算機結構、人工智慧、高科技創業和研發管理
蔡孟峰 助理教授	資料探勘、資料倉儲、分散式系統	* Min-Feng Wang, Sie-Long Jheng, Meng-Feng Tsai, Cheng-Hsien Tang, "Enterprise Email Classification Based on Social Network Features," ASONAM 2011: 532-536 (EI) * Cheng-Hsien Tang, Min-Feng Wang, Wei-Jen Wang, Meng-Feng Tsai, Yuji Urata, Chow-Choong Ngeow, Induk Lee, Kuiyun Huang, "Large-Scale Data Management and Analysis for Astronomical Research," Proceeding of Science(ISGC 2011 & OGF 31) 044	離散數學、計算機概論、資料倉儲系統與知識庫、機率與統計、進階資料採礦
蘇柏齊 助理教授	影像與視訊處理、多媒體資料庫	*Po-Chyi Su, Chun-Chieh Chen and Hong-Min Chang, "Towards Effective Content Authentication for Digital Videos by Employing Feature Extraction and Quantization," IEEE Transactions on	資料壓縮、計算機組織、數位訊號處理專題 研究、工程數學

		<p>Circuits and Systems for Video Technology, vol. 19, no. 5, pp. 668-677, May 2009, (Impact Factor 2009:2.584).</p> <p>*Po-Chyi Su and C.-C. Jay Kuo, "Steganography in JPEG2000 Compressed Images," IEEE Transaction on Consumer Electronics, Special Issue on JPEG2000:Implementations and Applications, vol. 49, no. 4, pp. 824-832, Nov. 2003.</p>	
許富皓 助理教授	電腦及網路安全、裝置驅動、記憶體與程序管理、OS 核心、網路應用	<p>*Fu-Hau Hsu*, Chang-Kuo Tso, Yi-Chun Yeh, Wei-Jen Wang, and Li-Han Chen, "BrowserGuard: A Behavior-based Solution to Drive-by-Download Attacks," IEEE Journal on Selected Areas in Communications, Volume 29, Issue:7, pages 1461 - 1468, August 2011.</p> <p>*Fu-Hau Hsu, Cheng-Hsien Huang, Chi-Hsien Hsu, Chih-Wen Ou*, Li-Han Chen, and Ping-Cheng Chiu, "HSP: A solution against heap sprays," Journal of Systems and Software, Volume 83, Issue 11, November, 2010, Pages 2227-2236.</p>	Linux 作業系統、電腦攻擊與防禦、現代作業系統核心、程式語言、演算法在Linux 作業系統上之應用、作業系統解譯器之計算理論
張貴雲 助理教授	無線感測網路、圖論與組合最佳化	<p>* G. Y. Chang and G. H. Chen, "(t, k)-diagnosability of multiprocessor systems with applications to grids and tori," SIAM Journal on Computing, vol. 37, no. 4, pp. 1280-1298, 2007 (SCI).</p> <p>* G. Y. Chang, "Conditional (t, k)-Diagnosis under the PMC Model," IEEE Transactions on Parallel and Distributed Systems, vol. 22, no. 11,</p>	無線通訊與網路、線性代數、編譯器、高等系統程式設計、計算理論 I 無線感測網路協定與應用

		pp. 1797-1803, 2011. (SCI)	
<b>王尉任 助理 教授</b>	分散式程式語言、網格計算、同儕計算、分散式計算理論模型、垃圾收集演算法	<p>* Liu, E. Z. F., Lin, S. S. J., Wang, W. R., &amp; Yuan, S. M., "Albatross III: A WWW-based course support system," in <i>International Journal of Instructional Media</i>, 28(4), 363-374, 2001.</p> <p>* Min-Yi Tsai, Ping-Fang Chiang, Yen-Jan Chang, and Wei-Jen Wang*, "Heuristic Scheduling Strategies for Linear-Dependent and Independent Jobs on Heterogeneous Grids," <i>Communications in Computer and Information Science</i>, 2011</p>	計算機概論、網格計算概論、高等分散式計算模型、P2P 應用服務、進階 Java 程式設計、雲端運算概論
<b>孫敏德 助理 教授</b>	無線Ad Hoc 通訊、演算法設計與分析	<p>* K. Sakai, S. C.-H. Huang, W.-S. Ku, M.-T. Sun*, and X. Cheng, "Timer-Based CDS Construction in Wireless Ad Hoc Networks," <i>IEEE Transactions on Mobile Computing</i>, Vol. 10, No. 10, pp. 1388-1402, Oct. 2011.</p> <p>* M.-T. Sun*, C.-W. Yi, C.-K. Yang, and T.-H. Lai, "An Optimal Algorithm for The Minimum Disc Cover Problem," <i>Algorithmica</i>, vol. 50, no. 1, pp. 58-71, Jan, 2008.</p>	資料結構、無線Ad Hoc 通訊、演算法、計算理論、家庭網路、進階資料結構、計算幾何、家庭感測網路與實驗、分散式計算演算法
<b>鄭旭詠 助理 教授</b>	視訊分析、機器學習、影像及訊號處理、智慧型系統	<p>* <u>Hsu-Yung Cheng</u>*, Chih-Chia Weng, Yi-Ying Chen "Vehicle detection in aerial surveillance using dynamic Bayesian networks," <i>IEEE Trans. on Image Processing</i>, vol.21, no.4, pp. 2152-2159, Apr. 2012.</p> <p>* <u>Hsu-Yung Cheng</u>* and Shih-Han Hsu, "Intelligent highway traffic surveillance with self-diagnosis abilities," <i>IEEE Trans. on Intelligent Transportation Systems</i>, vol. 12, no. 4, pp. 1462-1472, Dec. 2011.</p>	計算機網路、計算機結構、統計學習理論、電腦視覺原理及應用簡介、計算機結構、智慧型監控系統與實驗



<p><b>施國琛 教授</b></p>	<p>互動式多媒體及遊戲、數位學習系統、普適計算</p>	<p>* Nick C. Tang, Chiou-Ting Hsu, Chih-Wen Su, Timothy K. Shih and Hong-Yuan Mark Liao, "Video Inpainting on Digitized Vintage Films via Maintaining Spatiotemporal Continuity," accepted, IEEE Transactions on Multimedia, 2011. (SCI, EI)</p> <p>* Jui-Hung Chen, Han-Bin Chang, Chun-Yi Shen, Te-Hua Wang, Wen-Chih Chang, Timothy K. Shih, "Immersive Learning Environment with Integrated Interactive Video and Ubiquitous Technologies," in Journal of Convergence Information Technology, vol.5, no.9, pp.61-72, 2010. (EI)</p>	<p>互動式電腦繪圖及遊戲設計、多媒體技術及應用、數位學習標準及軟體系統</p>
<p><b>鄭永斌 副教授</b></p>	<p>軟體工程，軟體視覺化(3D)，物件導向分析與設計，自動化分析與驗證，軟體測試</p>	<p>*Yung-Pin Cheng, Janet Mei-Chuen Lin, "A Constrained and Guided Approach for Managing Software Engineering Course Projects" IEEE Trans. Education 53(3): 430-436 (2010)</p> <p>* Yung-Pin Cheng, Jih-Feng Chen, Min-Chieh Chiu, Nien-Wei Lai, Chien-Chi Tseng "xDIVA: A Debugging Visualization System with Composable Visualization Metaphors". In Proceedings of 23<sup>rd</sup> Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications(OOPSLA2008), Nashville, Tennessee, USA., 2008</p>	<p>軟體專案管理、物件導向程式設計、進階物件導向技術</p>
<p><b>王家慶 助理教授</b></p>	<p>多媒體處理、語音/音訊處理、IC晶片設計、嵌入式系統</p>	<p>Jia-Ching Wang, A Fast Mode Decision Algorithm and Its VLSI Design for H.264/AVC Intra-Prediction, Authorized licensed use limited to: National Cheng Kung University. Downloaded on November</p>	<p>多媒體軟硬體整合設計、語音訊號處理、工程數學、多媒體資訊系統、認知語音訊號處理、多媒體訊號處理、</p>

<p><b>葉士青 助理 教授</b></p>	<p>人機介面、互動式技術、神經運動復健學、認知科學</p>	<p>16, 2008</p> <p>* Shih-Ching Yeh, Wu-Yuin Hwang, Jing-Liang Wang, Shi-Yi Zhan, "Study of Co-located and Distant Collaboration with Symbolic Support via a Haptics-enhanced Virtual Reality Task", <i>Journal of Interactive Learning Environments</i>, 2012 [SSCI]</p> <p>* Stewart, J. C., Yeh, S., Jung, Y., Yoon, H., Whitford, M., Chen, S., McLaughlin, M., Rizzo, A., &amp; Winstein, C., " Intervention to enhance skilled arm and hand movements after stroke: A feasibility study using a new virtual reality system ", <i>Journal of NeuroEngineering and Rehabilitation</i>, vol. 4, Jun. 2007.[SCI]</p>	<p>軟硬體整合設計</p> <p>互動科技及 3D 遊戲技術於醫學工程暨復健的應用、3D 計算機圖學、電腦動畫與體感遊戲技術</p>
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