Name：Yung-Fu Chen

Education：

- 1996-2002: Ph.D., Institute of Biomedical Engineering, National Cheng Kung University, Tainan, Taiwan.
- 1988-1990: M.S., Department of Electrical and Computer Engineering, University of Missouri, Rolla, Missouri, USA.
- 1978-1983: Diploma, Department of Electrical Engineering, National Taipei Institute of Technology, Taipei, Taiwan.

Career Experience：

- Aug. 2014- Now: Professor, Department of Dental Technology and Materials Science and Department of Healthcare Administration, Central Taiwan University of Science and Technology, Taichung, Taiwan
- Aug. 2014- Now: Professor, Institute of Biomedical Engineering and Materials Science and Department of Healthcare Administration, Central Taiwan University of Science and Technology, Taichung, Taiwan
- Aug 2010- Now: Adjunct Professor, Department of Health Services Administration, China Medical University, Taichung, Taiwan.
- Aug. 2010-July 2014: Professor, Department of Healthcare Administration and Institute of Biomedical Engineering and Materials Science, Central Taiwan University of Science and Technology, Taichung, Taiwan
- Aug. 2010- May 2014: Dean, College of Management, Central Taiwan University of Science and Technology, Taichung, Taiwan.
- Feb. 2008-July 2010: Professor, Department of Health Services Administration, China Medical University, Taichung, Taiwan.
- Aug. 2006-Jan. 2008: Associate Professor, Department of Health Services Administration, China Medical University, Taichung, Taiwan.
- Aug. 2004-July 2006: Associate Professor, Department of Computer Science and Information Engineering, Dayeh University, Changhua County, Taiwan.
- Sep. 2002-Aug. 2004: Director, Computer Center, Chungtai Institute of Health Sciences and Technology, Taichung, Taiwan.
- Feb. 2000- July 2004: Associate Professor, Department of Management Information Systems, Chungtai Institute of Health Sciences and Technology, Taichung, Taiwan.
- Aug. 2004-July 2007: Adjunct Associate Professor, Institute of Biomedical Engineering and Material Science, Central Taiwan University of Science and Technology.
- Aug. 2001- June 2005: Adjunct Associate Professor, National Open University,
- Aug. 1992- Jan. 2000: Joint Lecturer, Department of Management Information Systems and Department of Radiological Technology, Chungtai Institute of Health Sciences and Technology, Taichung, Taiwan.
- Aug.1994-July 1995: Director, Computer Ceneter, Chungtai Institute of Technology.

- Aug. 1991- July 1992: Project Researcher, Division of Personal Computer System, Acer Incorporated, Taipei, Taiwan. Involved in the design of Intel 80486 based motherboards and multimedia PCs. Also served as an instuctor in tutoring PC system concepts and multimedia techniques.
- 1990-1991: Field System Engineer, Division of Ion Implantation System, Eaton Corporation, Hsinchu, Taiwan. Installation and maintenance of medium- and high-current ion implantation systems for semiconductor FABs. During this period, I had taken a 6-week training course regarding the medium-current ion implanter in Eaton's branch office located in Austin, Texas, USA.
- 1990: Field Application Engineer, Intel Corporation.
- Oct. 1985- July 1988: Medical System Engineer, Division of X-ray Diagnosing System, Unison Company (An agent of SIEMENS and PHILIPS Medical Systems), Taipei, Taiwan.

Courses Taught：
- Biomedical Image Processing and Analysis
- Special Topics on Health Information Management
- Dental Radiography and Imaging Modalities

Professional Fields：
- Electrical Engineering
- Computer Science and Engineering
- Biomedical Engineering

Research Interests：
- Medical informatics
- Data Mining
- Multimedia and Digital Preservations

Representative Publication in 5 Years：

Journal Articles：

1. Yung-Fu Chen, Po-Chi Huang, Ker-Cheng Lin, Hsuan-Hung Lin, Li-En Wang, Chung-Chuan Cheng, Tsung-Po Chen, Yung-Kuan Chan, John Y. Chiang (Jan. 2014) Semi-Automatic Segmentation and Classification of Pap Smear Cells. *IEEE Journal of Biomedical and Helath Informatics* (Formally *IEEE Transactions on Information Technology in BioMedicin*e), vol. 18(1), pp. 94 - 108. (SCI)

2. Ming-Huei Lee, Alex Tong-Long Lin, Hann-Chorng Kuo, Yung-Fu Chen (Jan. 2014) Clinical Characteristic Picture and Impact of Symptoms on Quality of Life of Interstitial Cystitis Patients in Taiwan, *LUTS*, vol. 6(1), pp. 20-25. (SCI)

3. Ming-Huei Lee, Huei-Ching Wu, Jen-Yung Lin, Tan-Hsu Tan, Po-Chou Chan, Yung-Fu Chen* (2014) Development and evaluation of an E-health system to care for patients with Bladder Pain Syndrome/Interstitial Cystitis, *International Journal of Urology,* vol. 21 (Suppl 1), 62–68. (SCI)

4. Ker-Chern Lin, Lin-Sheng Chang, Chien-Ming Tseng, Hsuan-Hung Lin, Yung-Fu Chen*, Chien-Lei Chao (2014), A Smartphone APP for Health and Tourism Promotion, *Mathematical Problems in Engineering*, vol. 2014, Article ID 583179, 10 pages. (SCI)

5. Wei-Sheng Chung, Cheng-Li Lin, Fung-Chang Sung, Wu-Huei Hsu, Yung-Fu Chen, and Chia-Hung Kao (May 2014) Increased Risks of Deep Vein Thrombosis and Pulmonary Embolism in Sjögren Syndrome: A Nationwide Cohort Study, *J Rheumatol*, 41(5), 909-15 (SCI).

6. Wei-Sheng Chung, Chiao-Ling Peng, Cheng-Li Lin, Yen-Jung Chang, Yung-Fu Chen, John Y. Chiang, Fung-Chang Sung, Chia-Hung Kao (Oct. 2014) Rheumatoid arthritis increases the risk of deep vein thrombosis and pulmonary thromboembolism: A nationwide cohort study, *Annals of the Rheumatic Diseases*, vol. 73(10), pp. 1774-80 (SCI)

7. Wei-Sheng Chung, Yung-Fu Chen, Jiin-Chyr Hsu, Su-Ching Chen, John Y. Chiang (Oct. 2014) Inhaled Corticosteroids and the Increased Risk of Pulmonary Tuberculosis: A Population-based Case Control Study, *International Journal of Clinical Practice*, vol. 68(10), pp. 1193-9. (SCI).

8. Wei-Sheng Chung, Cheng-Li Lin, Yung-Fu Chen, Feng-Ming Ho, Wu-Huei Hsu and Chia-Hung Kao (Nov. 2014), Increased stroke risk among adult asthmatic patients, *European Journal of Clinical Investigation*, vol 44(11), pp. 1025-1033. (SCI)

9. Wei-Sheng Chung, Cheng-Li Lin, Yung-Fu Chen, Wu-Huei Hsu, Jiin-Chyr Hsu, Chia-Hung Kao (November 2014) Pulmonary Tuberculosis Increases the Risk of Pulmonary Thromboembolism: A Nationwide Population-based Cohort Study, *Thrombosis and Haemostasis*, vol. 112(6), pp. 1325-7. (SCI)

10. Yung-Fu Chen, Liang-Wen Hang, Chun-Sen Huang, Shinn-jye Liang, and Wei-Sheng Chung* (Feb, 2015) Polysomnographic predictors of persistent continuous positive airway pressure adherence in patients with moderate and severe obstructive sleep apnea, *The Kaohsiung Journal of Medical Sciences*, vol. 31(2), pp. 83–89. (SCI)

11. Wei-Sheng Chung, Yung-Fu Chen, Cheng-Li Lin, Shih-Ni Chang, Wu-Huei Hsu, Chia-Hung Kao (Jan. 2015), Sleep disorders increase the risk of venous thromboembolism in individuals without sleep apnea: a nationwide population-based cohort study in Taiwan, *Sleep Medicine*, vol. 16(1), pp. 168-72. (SCI)

12. Liang-Wen Hang, Hsiang-Ling Wang, Jen-Ho Chen, Jiin-Chyr Hsu, Hsuan-Hung Lin, Wei-Sheng Chung, Yung-Fu Chen* (Mar. 2015), Validation of overnight oximetry to diagnose patients with moderate to severe obstructive sleep apnea, *BMC- Pulmonary Medicine*, vol. 15:24. (doi:10.1186/s12890-015-0017-z), (SCI)

13. Jong-Yi Wang, Hsiao-Yun Ho, Jen-De Chen, Sinkuo Chai, Chih-Jaan Tai, Yung-Fu Chen* (July 2015) Attitudes towards Inter-hospital Electronic Patient Records Exchange: Discrepancies among Physicians, Medical Record Staff, and Patients, *BMC-Health Services Research*, vol. 15:264 (doi:10.1186/s12913-015-0896-y) (SCI)

14. H.-H. Lin[†], F.-M. Ho, Yung-Fu Chen[†], C.-M. Tseng, C.-C. Ho, Wei-Sheng Chung (Aug. 2015) Increased risk of erectile dysfunction among patients with sleep disorders: A nationwide population-based cohort study. *International Journal of Clinical Practice*, vol. 69(8), pp. 846-852. (SCI).[†] Co-first author.

15. Chung-Chuan Cheng, Chun-Feng Lu, Ju-Yi Hsieh, Yaw-Jen Lin, Jin-Shiuh Taur, and Yung-Fu Chen* (August 2015) Design of a computer-assisted system to automatically detect cell types using ANA IIF images for the diagnosis of autoimmune diseases. *Journal of Medical Systems*,

vol. 39:117, pp. 1-12. (SCI).

16. Yung-Fu Chen, Hsuan-Hung Lin, Chuan-Chin Lu, Jing-Duan Hung, Ming-Huei Lee, Chao-Yu Hsu, Wei-Sheng Chung* (Oct. 2015). Gout and a subsequent increased risk of erectile dysfunction in men aged 64 and below: A nationwide cohort study in Taiwan, *Journal of Rheumatology*, vol. 42(10), pp.1898-1905. (SCI)

17. Tuan D. Pham, Taishi Abe, Ryuichi Oka, and Yung-Fu Chen (Dec. 2015), Measures of Morphological Complexity of Gray Matter on Magnetic Resonance Imaging for Control Age Grouping, *Entropy*, vol. 17(12), pp. 8130–8151. (SCI)

18. W.-S. Chung, F.-M. Ho, Y.-F. Chen (2015), Sleep Disorders and the risk of Rheumatoid Arthritis: A Nationalwide Cohort Study, Ann Rheum Dis, vol. 74 (Suppl2), pp. 939. (SCI)

19. Ren-Hao Pan, Rung-Ching Chen, Elong Lin, Yung-Kuan Chan, Yung-Fu Chen* (2016) Using Genetic Algorithm and Maximum Clique in the Design of Multiplex PCR Primers, *International Journal of Data Mining and Bioinformatics*, vol. 14 (2), pp. 177-195. (SCI)

20. Chung-Liang Lai[†], Chien-Ming Tseng[†], Tzu-Kuan Liao, Ya-Ling Huang, D. Erdenetsogt, Yung-Fu Chen* (April, 2016), A Kinect-based system for balance rehabilitation of stroke patients, *IEICE Transactions on Information and System*, vol. E99–D (4), pp. 1032-1037. (SCI)

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23. Lee, M. H., Wu, H. C., Chen, W. C., Chen, Y. F. (Aug. 2016) Multidisciplinary self-management telecare system may improve quality of life in patients with interstitial cystitis/bladder pain syndrome (IC/BPS)- A randomized controlled trial. *Neurourology and Urodynamics*, vol. 35 (S4), S94-S95. (SCI)

24. Hsu, S. K., Tian, J., Ho, W. F., Hsu, H. C., Liao, H. J., **Chen, Y. F.**, & Wu, S. C. (2016). Enhancing the bioactivity of yttria-stabilized zirconia immobilized with adhesive peptide using L-dopa as cross-linker. *Thin Solid Films*, vol. 620, pp. 145-149. (SCI)

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28. **Yung-Fu Chen**, Hsuan-Hung Lin, Chih-Sheng Lin, Battsetseg Turbat, Kuo-An Wang, Wei-Sheng Chung (May, 2017), Bronchiectasis and Increased Risk of Ischemic Stroke: A Nationwide

Population-Based Cohort Study, *International Journal of Chronic Obstructive Pulmonary Disease*, vol. 2017:12, pp. 1375–1383. (SCI)

29. Tan-Hsu Tan, Munkhjargal Gochoo, **Yung-Fu Chen**, Jin-Jia Hu, John Chiang, Ching-Su Chang, Ming-Huei Lee, Yung-Nian Hsu, Jiin-Chyr Hsu (2017), Ubiquitous Emergency Medical Service System Based on Wireless Biosensors, Traffic Information and Wireless Communication Technologies: Development and Evaluation, *Sensor*, vol. 17(1), 202, pp. 1-15. (SCI)

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32. Yung-Fu Chen, Chih-Sheng Lin, Chun-Fu Hong, Dah-Jye Lee, Changming Sun, Hsuan-Hung Lin* (Sep. 2019), Design of a Clinical Decision Support System for Predicting Erectile Dysfunction in Men, IEEE Journal of Biomedical and Health Informatics, vol. 23(5), pp. 2127-2137 (SCI)

33. Munkhjargal Gochoo, Tan-Hsu Tan, Shih-CHia Huang, Tsedevdorj Batjargal, Jun-Wei Hsieh, Fady Alnajjar, Yung-Fu Chen (Sep. 2019) Novel IoT-Based Privacy-Preserving Yoga Posture Recognition System Using Low-Resolution Infrared Sensors and Deep Learning, IEEE Internet of Things Journal, vol. 6(4), 7192-7200. (SCI)

34. Huey-Jen Lai, Hsuan-Hung Lin, Tan-Hsu Tan, Chih-Sheng Lin, Yung-Fu Chen* (2020), Designing a Clinical Decision Support System to Predict Readmissions for Patients Admitted with All-Cause Conditions, Journal of Ambient Intelligence and Humanized Computing, (In Press, DOI: 10.1007/s12652-019-01579-6) (SCI)

Conference Papers：

1. Tan-Hsu Tan, Munkhjargal Gochoo, Ke-Hao Chen, Fu-Rong Jean, Yung-Fu Chen, Fu-Jin Shih, and Chiung Fang Ho, Indoor Activity Monitoring System for Elderly Using RFID and FitBit Flex Wristband, Proceedings of 2014 IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI), (Valencia, Spain, 1-4 June, 2014), pp. 41 – 44.

2. Chung-Liang Lai, Ya-Ling Huang, Tzu-Kuan Liao, Chien-Ming Tseng, Yung-Fu Chen, D. Erdenetsogt, A Microsoft Kinect-based virtual rehabilitation system to train balance ability for stroke patients, Proceedings of 2015 International Conference on Cyberworlds (Visby, Sweden, Oct. 7-9, 2015), pp. 54-60.

3. Yung-Fa Huang, Tan-Hsu Tan, Bor-An Chen, Shing-Hong Liu, Yung-Fu Chen, Performance of Resource Allocation in Device-to-Device Communication Systems Based on Particle Swarm Optimization, Performance of resource allocation in device-to-device communication systems based on particle swarm optimization. In *Proceedings of 2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC2017)*, Banff, Canada, pp. 400-404. (**EI**)

4. Kuo-An Wang, Yung-Fu Chen, La Ode Abdul Rahman, Hsuan-Hung Lin, Wei-Sheng Chung, Using Taiwan NHIRD for Studying the Effect of Inhaled Corticosteroids on Fracture. In *Proceedings of 2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC2017)*, Banff, Canada, pp. 2667-2671. (**EI**)

5. Huey-Jen Lai, Po-Chou Chan, Hsuan-Hung Lin, Yung-Fu Chen, Chih-Sheng Lin, Jiin-Chyr Hsu, A Web-based Decision Support System for Predicting Readmission of Pneumonia Patients after Discharge. In *Proceedings of 2018 IEEE International Conference on Systems, Man, and Cybernetics (SMC2018)*, Miyzsaki, Japan, pp. 2301-2306, 2018. (EI)

6. Fu-Hsing Wu, Hsuan-Hung Lin, Po-Chou Chan, Chien-Ming Tseng, Yung-Fu Chen, and Chih-Sheng Lin (2020) Clinical Decision Support Systems for Predicting Patients Liable to Acquire Acute Myocardial Infarctions, Presented at the *International Conference of Pattern Recognition and Artificial Intelligence*. Zhongshan City, China. October, 2020

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