NANYANG TECHNOLOGICAL UNIVERSITY

CV Form for Academic Staff (Part-I)

Name : Kwoh Chee Keong **Present Appointment :** Assoc Prof

School : School of Computer Engineering **Division :** Division of Information Systems

Date of 1st Appointment : 1 Apr 1992

Academic Qualifications: (State Name of University, year of award & class of honours)

BEng(Hons) Cl 1 - National University of Singapore - 1987
MSc(IndEng) - National University of Singapore - 1991
DIC PhD - University of London - 1995
PGDIPTHE - Nanyang Technological University – 1999
10 year Long Service Award - 2001
15 year Long Service Award - 2006

Professional Qualifications/Memberships: (State date of membership)

The Institution of Engineers Singapore, Senior Member	2005
BMERC Fellow	2005
Association for Medical and Bio-Informatics, Singapore, Member	2004
Imperial College Alumni Association of Singapore (ICAAS), Lifetime member	2002

Summary of Working Experience: (with dates)

1 Jan 2007 – 31 Dec 2008	Deputy Director, Biomedical Engrg Research Centre, NTU
1 Nov 2006 - 31 Oct 2008	Programme Director, MSc (Bioinformatics)
1 Jan 2006 – 31 Dec 2007	Deputy Director, Biomedical & Pharmaceutical Engineering Cluster (BPE) Cluster
July 2004 - Present	Associate Professor, Div of Bioengineering
Jan 2002 – Jun 2006	Programme Director, MSc (Bioinformatics)
1 Jan 2000 - Present	Associate Professor, SCE
1 Jan 1999 - 31 Dec 1999	Assistant Professor, NTU
19 May 1997 - 31 Mar 2003	Deputy Director, Biomedical Engrg Research Centre, NTU
1 Jan 1996 - 31 Dec 1998	Lecturer, NTU
1 Apr 1992 - 31 Dec 1995	Lecturer (ASDS), NTU
Jul 1989 - Mar 1992	System Specialist, Singapore Computer Systems Pte Ltd
Jul 1988 - Jun 1989	Systems Engineer, Singapore Computer Systems Pte Ltd
May 1987 - Jun 1988	Programmer Analyst, Singapore Computer Systems Pte Ltd

CV Form for Academic Staff (Part-II)

Name: Kwoh Chee Keong School: SCE

A. TEACHING

(1) **Text-books, book chapters, monograph, software**

JMMB special editor on "Moving Technology Towards Better Patient Care." 2005

(2) **Development of teaching materials**

Planed and lectured subjects in

1. **BG2011 Computational Methods in Biomedical Engineering:** Use of numerical methods to solve problems in science and engineering, with emphasis on biomedical engineering. Linear and non-linear algebraic equations. Optimization. Least-squares regression and interpolation. Numerical differentiation and integration. Numerical solutions of ordinary differential equations (ODE). Applications to statistical analysis. Applications to design of experiments.
2. **BI6123 Methods and Tools of Proteomics (2007)**: Proteomics study and identify protein structure, interactions of protein/protein and protein/DNA and biology of organisms. We will further introduce the newly developed technology for the quantitative analysis of protein expression and function on a genome-wide scale.
3. **BI6102 and SC448 Introductory Bioinformatics (2005,06):** Basic bioinformatics concepts. databases, tools and applications.
4. **BI6103 Computational Biology (2006):**
5. **BG3011 Biocomputing (2005, 06)**: Introduction the new course of biocomputing for students in SCBE, the subject is first offered in July 2005; It covers Concepts; Bioinformatics databases; Sequence alignment; Phylogeny and protein structure prediction.
6. **Curriculum for MSc in Bioinformatics**: From August 2001 to June 2002, I worked with Vice-Dean (Academic) SCE, Head, Natural Science of NIE, Vice-Dean (Academic) of SBS and Professor from MPE and EEE to structure the new MSc in Bioinformatics.
7. **BI6104 Biostatistics**: First offered in July 2003, this course equipped the students in MSc with Knowledge of statistics, experimental design and statistical learning.
8. **CE307 Computer Peripherals**: In 1996 – 2000, re-design the course to include start-of-the-art techniques such as PRML, USB and Bluetooth.
9. **M495 & M6524 Medical Assist Surgery** (2000-2002): Co-planed and lectured the final year and MSc elective for Biomedical Engineering.
10. **Digital Signal Processing** (1992): Planed and lectured the final year elective for the computer engineering.

(3) **Service as examiner**

I have been appointed as examiner for confirmation and thesis.

1. Examination of Post-graduate students in **2007**
   PhD thesis examiner: Li Hu (NUS)
   PhD Confirmation: Gao Xiao Bin
2. Examination of Post-graduate students in **2006**
   Examination of Thesis: Du Zhuhua (PhD), Liu Weigo (PhD), Yap Yi-Lwern Kevin (Meng)
   FY confirmation: Mr Chen Hongjun (MPE), Cui Zhanhua, Nguyen Van Hien, Shen Li, Yu Yiting
3. Examination of Post-graduate students in **2004/05**
   Examination of Thesis: Ho Sy Loi (PhD), Khin Myo Win (PhD)
   FY confirmation: Mr Chen Hongjun (MPE), Nguyen Van Hien
4. Examination of Post-graduate students in **2003/04**
   Examination Of Thesis: Sergey V Izraylit (MSc)
5. Examiner for PhD 2005:
   Abdul Wahab Bin Abdul Rahman, Zhao Jianhui
6. Examiner for PhD 2006:
   Du Zhuhua; Liu Weiguo
7. Examiner for PhD confirmation:
   Yang Xiao (PhD, SCE); Cui Zhanhua (PhD, MPE); Shen Li (PhD, SCE); Yu Yiting (PhD, MPE)

B. RESEARCH

(1) **Awards**

Outstanding Paper Award, for the work entitled "Predition of Shared Regulatory Motifs from Upstream DNA Database for Gallus Gallus." in The International Conference on Biomedical and Pharmaceutical Engineering 2006 (ICBPE2006) 2006. Singapore.

(2) **Citations**

Research Output Summary

indicate total number and number in last three years (i.e., July 2004 – June 2007)

	Total	Last 3 Years
No. of journal papers	33	15
No. of conf. papers	85	38
No. of Book chapters		
No. of Edited books	1	1
No. of Authored books		
No. of patents	1	

Total citations of my papers:

(Google Scholar, Web of Sciences, Scopus) last update: 2007-11-27

	Citation Count	H-Index
Google Scholar	166	7
Scopus	79	4
Web of Sciences	*47*	*4*

(3) **Service as editor and associate editor for international journals**

Editor, International Journal on Biomedical and Pharmaceutical Engineering 2007 – Present
Editor, Bioinformation (indexed by Pubmed) – Journal 2005 – Present
Guest Editor for JMMB special editor on "Moving Technology Towards Better Patient Care." 2005

(4) **Service as external examiner for PhD thesis**

Examiner for PhD:

Li Hu (NUS, DOC), 2007
Li Haiquan (NUS, DOC) 2006
Liu Huiqing (NUS, DOC) 2005

(5) **Invited presentations at scientific meetings/workshops**

1. International Conference on Computational Systems Biology, Fudan U, Shanghai, July 22, 2006
2. HP-CAST 2005, "HPC applications in BIRC" May 2005, Krakow Poland
3. BII 2005, "Information Content Based Algorithm for Identification Of Essential Attributes Toward Discovering Disease-Specific Gene Regulatory Networks."
4. I2R-KAIST workshop (2005), "Information Content Based Algorithm For Identification Of Eukaryotes Gene Networks"
5. Bioscience Asia 2002, 'Life Science Initiatives and Milestones of NTU", Taipei, Taiwan, 2002
6. Bio-Ed 2002: The S* Bioinformatics Education Symposium, 11 March 2002 (Monday), "Bioinformatics Programme in the Nanyang Technological University"
7. 2nd A*STAR-NRC Joint Singapore-Canada Workshop (17th –18th March 2003) on The Interface Of Biology With Information Technology, "The SVM Classification of Light Regulated Arabidopsis Genome Expression Profiles".

(6) **Service as a reviewer**

1998- Present Reviewed international papers

2007: International Journal of Data Mining and Bioinformatics (IJDMB), JBCB
2006: reviewed papers for JBCB, JMMB, IJIT
2005: reviewed papers for IJIT, JBCB and IEEE TKDE, JMMB
2004: reviewed papers for IJIT, JBCB and IEEE TKDE

2003: reviewed papers for IJIT

(7) **Session chairman / (special) session organizer in conferences**

30 Mar– 2 April 2008	RECOMB2008 Organizing Committee
2-5 December 2007	GIW2007, back-to-back with AASBi07 and LBM07 Organizing Committee; Poster committee Session Chair
May, 2007	BioDM Workshop on Data Mining for Biomedical Applications (BioDM 2007) in conjunction with the 11th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2007) program committee
1-2 October 2007	The 2nd IAPR Workshop on Pattern Recognition in Bioinformatics (PRIB 2007) Singapore program committee
11-14 December 2006	2006 International Conference on Biomedical and Pharmaceutical Engineering, Singapore General Chair
6-8 December 2006	The 15th International Conference on Mechanics in Medicine and Biology (ICMMB) Facilities Chair
1 Jun - 31 Jul 2006	Algorithmic Biology: Algorithmic Techniques in Computational Biology Member
17-18 July 2006	The Third Annual RECOMB Satellite Workshop on Regulatory Genomics National University of Singapore, Singapore
June 2006	2006 IAPR Workshop on Pattern Recognition in Bioinformatics (PRIB'06) August 20, 2006 Hong Kong Convention and Exhibition Centre Program Committee
6-8 Dec 2006	ICMMB XVth International Conference on Mechanics in Medicine and Biology Facilities Chair
9-12 April 2006	10th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2006) Workshop Program Committee
10-12 Aug 2005	7th NTU-SGH Symposium Co-Chairman, NAEC, Singapore
Feb 2005	I2R-KAIST-NTU workshop Jointly organised by, I2R, KAIST and NTU
September 04 – January 05	Bioinformatics week (15-21 January 2005) in conjunction with APBC 2005 Jointly organised by AMBIS, I2R, BII, GIS, NTU and NUS
January 04 – January 05	The Third Asia-Pacific Bioinformatics Conference 2005 APBC2005, Singapore Local organizing committee

December 03 – September 04	1st International Bioengineering Conference in conjunction with 6th Annual NTU-SGH Biomedical Engineering Symposium September 8, 9 and 10, 2004 Marina Mandarin, Singapore. Treasurer
April 2002	5th NTU-SGH Symposium Co-Chairman,
June 2002 – December 03	2003 International Conference on CYBERWORLDS Local program committee
2002 – 2003	International Conference on Bioengineering & Biosciences: The Next Frontiers to be held in MPE, Nanyang Technological University, Singapore, June 24-26, 2003. Local organizing committee
26 October 2001	BioGrid Computing Symposium Organiser: Asia Pacific Bioinformatics Network (APBioNet) Co-organisers: Nanyang Technological University

(8) **External research funding**

Research Proposals accepted

Start and End dates	**Description**	**Source of Funding/ Involvement**
March 2008	Analysis of Past DRG data for the study of LOS for better utilization of Hospital Resources	Funding: BMERC equipment funding $10K
October 2005	Data Warehousing and Data Mining Analysis on Staphylococcus Aureus	Funding: SPF 022-2005 $5K funded by BPE Seed Grant Principle investigator
March 2005	A novel approach for inter- to intra- network analysis of genetic diseases using high-throughput data	Funding: RSS by BMERC Principle investigator
July 2004	SCE incubator proposal for "Evolutionary and Complex Systems Lab"	Funding: $28K funded by SCE incubator initiative Co-investigator
Oct 2002- Oct 2005	Neural Systems modeling with functional MRI	JT ARC 1/02 Funding: $658K Jointly funded by A*Star & MOE Co-investigator
July 2002 -	The Application of ultrasound based augmented reality with the directional vacuum-assisted breast biopsy device in the treatment of breast cancer	NMRC: (NMRC/0834/2002) $ 738,959 Co-investigator
12 March 2002 – March 2005	Research Grant for Bioinformatics Research Centre (BIRC)	Compaq Computer Asia Pte Ltd $1,500,000
March 2002 – March 2007	Singapore-University of Washington Alliance (SUWA) in Bioengineering Distributed Diagnosis and Home Healthcare (D2H2)	A-Star: $26,000,000 Co-investigator
Aug 2000 – March 2002	Proposal For Bioinformatics Research	NTU: $1,500,000 (CANES)
July 1999 -	Development of a robotic semi-automated remote handling system for radioiodine dispensing	NTU: $35,000 and SGH: $30,000 Principle Investigator
March 1999 – March 2002	Functional MR Time-Series Analysis	AcRF: RG 45/98, $121,000 Co-investigator

December 1998 - May 2001	Augmented Reality for Prosthesis Cup Placement	MOE AcRF: RG 5/98, S$288,532 Principle Investigator
November 1998 – October 2003	Robotic Skull Based Surgery	MOE: ARP 1/98, S$935,029 Co-investigator
December 1997 – December 2000	Cardiovascular and Respiratory Systems' Signal Simulation, Processing and Analysis for ICU, OR and Telemedicine Applications.	MOE ARC 13/97, S$757,415 Co-investigator
December 1997 – 2001	Strategic research: Interventive augmented reality for medical applications.	JT ARC 17/97, S$ 1,200,000 Co-investigator
Nov 1994 – 1997	Surgeon Assistant Robot for Selected urological disorder.	MOE ARC 3/94, S$577,900 Co-investigator

(9) **Research activities**

Analysis of Past hospital data for the study of LOS for better utilization of Hospital Resources (2008)
Development of A Computer Prediction System For Rational Design Of HLA-Based Peptide Vaccine (2006)
Data Mining and Analysis on Staphylococcus Aureus, Biomedical & Pharmaceutical Cluster (2005)
Co-investigator of Evolutionary and Complex Systems Lab, SCE incubator (2004)
Affiliated staff member of BioMedical Engineering Research Centre (BMERC, 1997-)
Affiliated staff member of BioInformatics Research Centre (BIRC, 2003-)
Member of Computer Integrated Medical Intervention Lab (CIMIL, 1997-)

(10) **Supervision of PhD and Master's Degree Dissertation**

1. Zou Qingsong - Object Based Volume Visualisation For Medical Imaging (PhD, 1998 – 2001), Sole supervisor
2. Chen Yintao - Image Processing For Ultrasound Guidance System In Breast Lump Operation, (M Eng, 1999 – 2001), Sole supervisor
3. Misra Sabita - Time Series Analysis Of Ecg For Detection Of Premature Ventricular Contraction (M Eng, 1999 – 2000), Main supervisor
4. Veena Mohan Bhajammanavar - Image Processing Of The Digital Mammogram For Segmentation And Characterization Of Microcalcifications, (M Eng, 1999 – 2000), Main supervisor
5. Wang Yan - Image-Based Indexing And Retrieval Of Trademark Logos, (M Eng, 1999 – 2001), Sole supervisor
6. Chen Yintao – Image Processing For Ultrasound Guidance System In Breast Lump Operation (M Eng, 2000 - 2002)
7. Zhao Jianhui- Human Animation from Motion Recognition, Analysis and Optimisation (PhD, 2000-2003), Sole supervisor
8. Jia Yiyu- Statistical Analysis Of Intron Phases At The Splice Sites Of Eukaryotic Genes (M Eng, 2002-2004), Main supervisor
9. Zhao Ying- Efficient Model And Feature Selection For SVM In Biomedical Data Analysis (M Eng, 2002-2004) , Sole supervisor
10. Zheng Yun- Design Of Gene Expression Networks From Microarray Data (PhD, 2002-), Sole supervisor
11. Zhang Guanlan- Computational Epitope-Driven Vaccine Design (PhD, 2004 -), Main supervisor
12. Li Ye- Development Of Mechanistic Methods For Microarray Data Analysis Preprocessing (PhD, 2005 -), Main supervisor
13. Zhou Deyu – (PhD, 2005), Co-supervisor
14. Adrianto Wirawan - Whole-Genome Discovery Of Transcriptional Regulator Binding Sites (PhD, 2005 -), Main supervisor
15. Poh Kok Leong Melvin - Identifying Transcription Factor Binding Sites Through A Hybrid Approach (PhD, 2005 -) Main supervisor
16. Stephanus Daniel Handoko - Multilevel Analysis Of Protein-Protein Interactions (PhD, 2006 -) Main Supervisor
17. Wu Min - Joint Mining Of Coherent Patterns Across Multiple Data Sets (PhD, 2006 -) Main Supervisor
18. Zhang Tianyou - Data Warehousing And Mining Analysis On Infectious Disease (PhD, 2005 -) Main Supervisor

C. SERVICE

(1) **Recognitions**

April 2007 – Mar 2009	**Chairman Of Keat Hong Inter-Racial And Religious Confidence Circle**	**Appointed by Ministry of Community Development, Youth and Sports**
Jan 2007 – Dec 2008	**Licensed Solemnizer**	**Appointed by Ministry of Community Development, Youth and Sports**
Nov 1999 – Present	**Community Mediator**	**Appointed by Ministry of Law as Community Mediator**

(2) **Awards**

2007 November, PAP Awards – Bronze
Long Service Medals – The medals are awarded to Party members for their dedication, loyalty and hard work•
Bronze – minimum 10 years of service

(3) **Service to the University (appointed by the President)**

Date	**Appointment**
1 Jan 2007 – 31 Dec 2008	Deputy Director, Biomedical Engrg Research Centre, NTU
1 Nov 2006 - 31 Oct 2008	Programme Director, MSc (Bioinformatics)
Jan 2006 – Dec 2007	Deputy Director, Biomedical & Pharmaceutical Engineering Cluster (BPE) Cluster
July 2004 - Present	Associate Professor, Div of Bioengineering
Jan 2002 – Jun 2006	Programme Director, MSc (Bioinformatics)
1 Jan 2000 - Present	Associate Professor, SCE
1 Jan 1999 - 31 Dec 1999	Assistant Professor, NTU
19 May 1997 - 31 Mar 2003	Deputy Director, Biomedical Engrg Research Centre, NTU
1 Jan 1996 - 31 Dec 1998	Lecturer, NTU
1 Apr 1992 - 31 Dec 1995	Lecturer (ASDS), NTU

(4) **Other service to the University**

Date	**Appointment**
Jan 2006 – Present	NTU-SGH Steering Committee
Jan 2005 – Present	BioE Curriculum Coordinator
Oct 2004 - 2005	MSc online web courses- Task Force
2002 – Present	Programme Director of MSc in Bioinformatics
July 1996 - Present	Mentor, SCE & SCBE.
1999 - 2000	Institute of Biomedical Engineering (IMBE) Task Force
2002 – 2003	Committee on Graduate Courses in Engineering
Sept 2004 – Oct 2004	Flagship programme proposal for Biomedical Computing
March 2003 – March 2004	Work on SMA II proposal for Biomedical Engineering
Jan – July 2003	Led the flagship programme for Biomedical Applications in SCE

(5) **Service to professional bodies**

a) Jan – Mar 2008: Judging Panel, Singapore Science & Engineering Fair (SSEF) 2008
b) Aug-Nov 2007: Judging Panel, Ngee Ann Poly webpage design competition
c) September 2002 – 2007: Member, Singapore Biomedical Compute Resource Management Committee (BII)
d) Sept 2004: Reviewer for NMRC Competitive Programme Grant
e) Sept 2003 Reviewer: for I-Award for SPRING Singapore on innovation awards.
f) March 2002 – Present: Mentors for National Science Scholars for scholar under A-Star

D. PUBLICATIONS

Research Output Summary
indicate total number and number in last three years (i.e., July 2004 – Present)

	Total	Last 3 Years
No. of journal papers	33	15
No. of conf. papers	85	38
No. of Book chapters		
No. of Edited books	1	1
No. of Authored books		
No. of patents	1	

Patent

1. Patent: "Computerised Boundary Estimation in Medical Images", Taiwan patent no. is 091446, valid from 11 Nov 1997 till 8 May 2017. US patent application no. is USSN 08/821,641, filed on 1 Mar 1996 (96-06116-3, Singapore).

E. PUBLICATIONS

Journal

1 Kwoh, C., Probabilistic reasoning from correlated objective data Ph. D. Thesis, 1995(Imperial College, London)

1 Kwoh, C.-K. and D.F. Gillies, Using hidden nodes in Bayesian networks. Artificial Intelligence, 1996. 88(1-2): p. 1-38.

2 Chan, C., et al., Prostate biopsy using augmented reality 3D visualization. Critical Reviews in Biomedical Engineering, 1998. 26(5): p. 415-416.

3 Kwoh, C.K., et al., Outline of Prostate Boundary using Harmonics Method. Medical & Biological Engineering & Computing, 1998. 36(6): p. 768-771.

4 Kwoh, C.-K. and D.F. Gillies, Probabilistic reasoning and multiple-expert methodology for correlated objective data. Artificial Intelligence in Engineering, 1998. 12(1-2): p. 21-33.

5 Tang, S.L., et al., Augmented Reality Systems for Medical Applications. IEEE Transaction, Engineering in Medicine and Biology, 1998. 17(3): p. 49-58.

6 Bhajamanavar, V.M., C.K. Kwoh, and S.M. Krishnan, Extraction of microcalcifications in a digital mammogram using regional watershed method. Journal of Digital Imaging, 2000. 13(2 Suppl 1): p. 127-130.

7 Sabita, M., C.K. Kwoh, and S.M. Krishnan, A New Technique for Non-linear Time Series Analysis of ECG signal for Detection of Ventricular Premature Beats. Annals of Biomedical Engineering: The Journal of the Biomedical Engineering Society, 2000.

8 Fei, B., et al., The safety issues of medical robotics. Reliability Engineering & System Safety, 2001. 73(2): p. 183-192.

9 Ho, G., et al., Experimental study of transurethral robotic laser resection of the prostate using the LaserTrode lightguide. Journal of Biomedical Optics, 2001. 6(2): p. 244-251.

10 Ho, G., et al., Fundamental studies of transurethral robotic laser resection of the prostate by means of continuous wave Nd:YAG laser using Lasertrode lightguide. Journal of Biomedical Optics, 2001. 6(2): p. 244-251.

11 Ho, G., et al., Computer- Assisted Transurethral Laser Resection Resection of the Prostate (CALRP):Theoretical and Experimental Motion Plan. IEEE Transactions on Biomedical Engineering, 2001. 48(10): p. 1125-1135.

12 Yeo, S.J., et al., Augmented Reality wtih X-ray Localisation for Total Hip Replacement. SGH Proceedings, 2001. 9(4).

13 Zou, Q., C.K. Kwoh, and W. Ng, Convex object based volume visualization: a formal proof and example. Computers & Graphics, 2001. 25(5): p. 857-873.

14 Kassim, W.S.Ng, and C.K.Kwoh, Review of locomotion techniques for robotic colonoscopy. IEEE Engineering in Medicine and Biology Magazine, 2002.

15 Teo, M.Y., et al., Development of a Robotic Dispensing System for Radioactive Iodine 131. SGH Proceedings, 2002. 11(1): p. 47-50.

16 Sakharkar, K.R., et al., u-Genome: A database on genome design in unicellular genomes. In Silico Biology, 2005. 5.

17 Zhao, J., L. Ling, and C.K. Kwoh, Human Posture Reconstruction and Animation from Monocular Images Based on Genetic Algorithms. International Journal of Image and Graphics, 2005. 5(2): p. 371-396.

18 Zhou, Z.L. and C.K. Kwoh, The Nearest Feature Midpoint - A Novel Approach for Pattern Classification. International Journal of Information Technology (IJIT), 2005. 11(1): p. 1-15.

19 Zhao, J., L. Ling, and C.K. Kwoh, 3D Posture Reconstruction and Human Animation from 2D Feature Points. Computer Graphics Forum (CGF), 2005. 24(4).

20 Zhang, G.L., et al., PREDTAP: a system for prediction of peptide binding to the human transporter associated with antigen processing. Immunome Research, 2006. 2(1): p. 3.

21 Zhao, Y. and C.K. Kwoh, Fast Leave-one-out Evaluation Guided Dynamic Gene Selection for Microarray Data Analysis. Soft Computing, 2006. 10(4): p. 346-350.

22 Zheng, Y. and C.K. Kwoh, Dynamic Algorithm for Inferring Qualitative Models of Gene Regulatory Networks. The International Journal of Data Mining and Bioinformatics, 2006. 1(2).

23 Zheng, Y. and C.K. Kwoh, Informative microRNA expression patterns for cancer classification, in Data Mining for Biomedical Applications, Proceedings. 2006, Springer-Verlag Berlin: Berlin. p. 143-154.

24 Zheng, Y. and C.K. Kwoh, Cancer Classification With MicroRNA Expression Patterns Found By An Information Theory Approach. JOURNAL OF COMPUTERS (JCP), 2006. 1(5): p. 30-39.

25 KWOH, C.K. and P.Y. NG, Network Analysis Approach for Biology. Cellular and Molecular Life Sciences, 2007 (accepted).

26 Zhang, G.L., et al., Prediction of Supertype-Specific HLA Class I Binding Peptides Using Support Vector Machines. Journal of Immunological Methods, 2007 accepted.

27 CHAN, C. F., K. IRWAN, et al. (2007). "VOLUME VISUALIZATION FOR SURGICAL PLANNING SYSTEM " Journal of Mechanics in Medicine and Biology 7(1): 55-64.
28 Zhang, G.L., et al., Hotspot Hunter: a computational system for large-scale screening and selection of candidate immunological hotspots in pathogen proteomes. BMC Bioinformatics, 2007 (Accepted).
29 Zhou, D., Y. He, et al. (2007 accepted.). "Extracting Protein-Protein Interactions from the Literature using the Hidden Vector State Model." International Journal of Bioinformatics Research and Applications.
30 Zhou, D., Y. He, et al. (2007 (accepted)). "Semi-supervised learning of the hidden vector state model for Extracting Protein-Protein Interactions." International Journal Artificial Intelligence in Medicine.

Conferences

1 Kwoh, C.K. and D.F. Gillies. Using Fourier Information for the Detection of the Lumaen in Endoscope Images. in Proceedings of the IEEE TENCON '94. 1994.
2 Kwoh, C.K. and D.F. Gillies. Estimating the Initial Values of Unobservable Variables in Visual Probabilitic Networks. in Proceedings of the 6th International Conference, CAIP 95. 1995. Prague.
3 Kwoh, C.K. and D.F. Gillies. Choice of error cost function for training unobservable nodes in Bayesian networks. in Proceedings of 1st International Conference on Knowledge-based Intelligent Electronic Systems. 1997.
4 Kwoh, C.K., et al. Interventive Augmented Reality. in International College of Surgeons and New Changi Hospital Combined Scientific Meeting. 1997.
5 Kwoh, C.K., et al. Image guidance for robotic TURP using ultrasound. in International College of Surgeons and New Changi Hospital Combined Scientific Meeting. 1997.
6 Kwoh, C.K., et al. ROBOTIC TURP AND TREATMENTS OF BPH. in International College of Surgeons and New Changi Hospital Combined Scientific Meeting. 1997.
7 Teo, T.T., E.C. Tan, and C.K. Kwoh. Implementation of a 4.8 Kbps CELP Speech Coder on a TMS320C44 Processor Board. in Proceedings of 1st International Conference on Information, Communications & Signal Processing (ICICS '97). 1997.
8 Kwoh, C.K. Radial Bas-relief (RBR) and Parametrically Deformable Model for Ultrasound Contour Determination. in 4th Asian congress in Urology, organised by Singapore Urological Association and Urological Association of Asia. 1998. Mandarin, Singapore.
9 Kwoh, C.K., W.S. Ng, and M.Y. Teo. Computer assisted prostate treatment ?past, present and future. in 4th Asian Congress in Urology by Singapore Urological Association and Urological Association of Asia. 1998.
10 Kwoh, C.K., et al. Safety guidelines for medical robots. in 4th Asian Congress in Urology by Singapore Urological Association and Urological Association of Asia. 1998.
11 Kwoh, C.K., M.Y. Teo, and W.S. Ng. Evalutation of computerised prostate boundary estimation in ultrasound images. in 4th Asian Congress in Urology by Singapore Urological Association and Urological Association of Asia. 1998.
12 Kwoh, C.K., et al. Augmented Reality for Therapy. in Inaugural Biomedical Engineering Symposium of NTU and SGH: Partnering for Healthcare Solutions. 1998. Auditorium, College of Medicine Building, Singapore General Hospital.
13 Chan, C.F., et al. Tessellated surface reconstruction from 2D contours. in Medical Image Computation and Computer-Assisted Intervention (MACCAI), 2nd International Conference. 1999.
14 Chee, C.F., et al. Prostate Biopsy using Augmented Reality 3D visualisation. in 18th Southern Biomedical Conference and the 2nd International Conference on Ethical Issues in Biomedical Engineering. 1999.
15 Fei, B.W., C.K. Kwoh, and W.S. Ng. Software design method for medical robot. in 21st IEEE EMBS, 1st EMBS-BMES joint Conference. 1999.
16 Khan, L.A., et al. X-ray localization technique for total hip replacement operation in augmented reality for therapy (ART). in 21st IEEE EMBS, 1st EMBS-BMES joint Conference. 1999.
17 Kwoh, C.K., G.N. Khan, and D.F. Gillies. Automated Endoscope Navigation and Advisory System from Medical Image. in SPIE's Int. Conf. on Physiology and Function from Multidimensional Images (Medical Imaging 1999). 1999. San Diego, California.
18 Sabita, M., C.K. Kwoh, and S.M. Krishnan. A quantitative method for ECG analysis for PVC detection. in The International Conference on Medical Diagnostic Techniques & Procedures. 1999.
19 Bhajamanavar, V.M., C.K. Kwoh, and S.M. Krishnan. Entropy-based thresholding for detection of microcalcifications in a digital Mammogram. in 14th international congress and Exhibition Computer Assisted Radiology and Surgery (CARS 2000). 2000.
20 Bhajamanavar, V.M., C.K. Kwoh, and S.M. Krishnan. Extraction of microcalcifications in a digital mammogram using regional watershed method. in Society for Computer Applications in Radiology (SCAR 2000). 2000.
21 Chan, K.L., et al. Nonlinear Techniques for Processing and Analysis of ECG Signals. in Third Annual SGH-NTU Biomedical Engineering Symposium. 2000.
22 Chen, Y.T. and C.K. Kwoh. Lesion Boundary Enhancement using Threshold Directed. in IEEE-EMBS Asia-Pacific Conference on Biomedical Engineering. 2000.
23 Fei, B.W., C.K. Kwoh, and W.S. Ng. The hazard identification and safety insurance control (HISIC) for medical robot. in World Congress on Medial Physics and Biomedical Engineering, 22nd Annual International Conf. Of IEEE EMBS. 2000.
24 Ho, G., et al. Perspectives of transurethral robotic laser resection of the prostate; Vaporization and coagulation effects with the Nd:YAG laser. in Proceedings of SPIE - The International Society for Optical Engineering. 2000. San Jose, CA, USA: Society of Photo-Optical Instrumentation Engineers.
25 Khan, L.A., et al. The image intensifier (II) distortion calibration method in X-ray localization for total hip replacement (THR). in Conference of Society for Computer Applications in Radiology (SCAR). 2000. Philadelphia, Pennsylvania.
26 Kwoh, C.K., S.J. Yeo, and S.W. Yung. X-RAY LOCALIZATION FOR TOTAL HIP REPLACEMENT. in 3rd NTU-SGH Annual Scientific Symposium. 2000.
27 Sabita, M., C.K. Kwoh, and S.M. Krishnan. A New Technique for Non-linear Time Series Analysis of ECG signal. in 2000 Annual Fall Meeting of the Biomedical Engineering Society. 2000.

28 Sabita, M., C.K. Kwoh, and S.M. Krishnan. A New Approach for Detecting and Delineation of QRS complex for PVC Detection. in IEEE-EMBS Asia-Pacific Conference on Biomedical Engineering. 2000.
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