

Curriculum Vitae for *Pichaya Tandayya*

10 May 2017

- 1 Family Name:** Tandayya
2 First Name: Pichaya
3 Date of Birth: 10 September 1968
4 Nationality: Thai
5 Position: Government Official / Assistant Professor

6 Education / Professional Studies:

<i>Date From/To</i>	<i>Degree</i>	<i>Field</i>	<i>Institution</i>
1985-1989	B.Eng.	Electrical Engineering	Prince of Songkhla University, Thailand
1996-1997	M.Phil.	Computer Science	University of Manchester, United Kingdom
1997-2000	Ph.D.	Computer Science	University of Manchester, United Kingdom

7 Language Skills:

<u>Language</u>	(in order of competency)
Thai	mother tongue
English	expert
German	basic

8 Membership of Professional Bodies: [IEEE](#), ACM, CSEA, [SISO](#), [ECTI](#)

9 Other Skills:

Research interests in

- Parallel and Distributed Computing,
- Parallel and Distributed Simulation Systems,
- Braille Computer System and Assistive Technology

10 Recent taught courses (2000-2015):

Undergraduate Level:

- Advanced Computer Architecture and Organization,
- Ethical, Legal and Social Issues in Computer Profession,
- Computer Graphics and Simulation Systems,
- Data Structure and Computer Programming Techniques,
- E-Commerce,
- Introduction to Computer Programming,
- Introduction to Engineering

Postgraduate Level:

Research and Development Methodologies,
Cloud Computing Principles and Paradigms,
Parallel and Distributed Computing,
Introduction to High Level Architecture and Creating Computer Simulation,
Parallel Computing,
Distributed Computing,
Parallel and Distributed Computing,
Parallel and Distributed Simulation Systems

11 Present Position within the organisation: Assistant Professor/Lecturer

12 Years with the organisation: 26 (since 1990)

13 Professional Experience Record:

<i>Date</i>	<i>Location</i>	<i>Organization</i>	<i>Position</i>	<i>Responsibilities</i>
May 1990 – now	Thailand	Prince of Songkla U.	Lecturer	Give lectures
Oct. 2001 – Sep. 2003	Thailand	Prince of Songkla U.	Deputy Head of Dept.	Academic affairs
Oct. 2003 – Nov. 2004, Jan. 2010 -Dec. 2010	Thailand	Prince of Songkla U.	Deputy Head of Dept.	Research & PG program management
Dec. 2004 – Nov. 2008	Thailand	Prince of Songkla U.	Head of Department	Administration and Management
2001 - 2004	Thailand	Prince of Songkla U.	Conference Secretary	Organising conferences
2004 - 2012	Thailand	Thai National Grid	Committee	PSU representative and Founding member
August 2007 – 2012	Thailand	Prince of Songkla U.	Head	PSU Grid Center
2009-2010	Thailand	Prince of Songkla U.	Head of iSys Research Group	Administration
Jan. 2010 – Dec. 2010	Thailand	Prince of Songkla U.	Head of MEng and PhD Programs.	Research & PG program management
Jan. 2010 – Dec. 2010	Thailand	Prince of Songkla U.	Deputy Head of Dept.	Research & PG studies

14 List of organised conferences

- Information and Computer Engineering Postgraduate Workshop 2002 - 2004 (ICEP 2002-2004)
- International Symposium on Communications and Information Technology (ISCIT 2003)
- National Computer Science and Engineering Conference (NCSEC 2004)
- Asia Modelling Symposium (AMS 2007)
- Annual Symposium on Computational Science and Engineering (ANSCSE 11), 2007
- International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2014)
- 12th International Joint Conference on Computer Science and Software Engineering (JCSSE 2015)

- The International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2016)
- 14th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2017)

15 List of conferences and Journals that I worked as a technical program committee

1. International Symposium on Communications and Information Technology (ISCIT 2001-Now)
2. National Computer Science and Engineering Conference (NCSEC 2001-Now)
3. Electrical Engineering Conference (EECON 2002-Now)
4. World Multiconference on Systemics Cybernetics and Informatics (SCI 2003-2005)
5. SCI Journal: Journal of Systemics, Cybernetics and Informatics (SCI 2003-2005)
6. European Simulation Interoperability Workshop (Euro-SIW 2004-2005)
7. Annual Symposium on Computational Science and Engineering (ANSCSE 2006-Now)
8. PSU-Engineering Conference (PEC 2002-Now)
9. International Convention on Rehabilitation Engineering & Assistive Technology (i-CREATe 2007-Now)
10. International Conference on Electrical Engineering/Electronics, Computer, Telecommunications, and Information Technology (ECTI-CON)
11. International Joint Conference on Computer Science and Software Engineering (JCSSE)
12. Songklanakarin Journal of Science and Technology
13. IEEE/ACM International Symposium on Distributed Simulation and Real-time Applications (DS-RT 2008-2009)
14. Multimedia Tools and Applications, Springer (Journal)

16 Awards

Research

- *2nd Prize and Professional Vote at Engineering Innovation*, Braille Translation, October 2004, Bitec, Bangna.
- *Invention Award from Prince of Songkla University*, Braille Computer System, September 2008.
- *Invention Award from Faculty of Engineering, Prince of Songkla University*, Braille Computer System, July 2008.

Students' works under supervision

National Software Contest

- *1st Prize, 6th National Software Contest (NSC 2004)*, Sansanee Bunsanong, Thai Braille to ASCII Translator, February 2004.
- *Special Prize from Thailand Association of the Blind*, Software for the Blind, 6th National Software Contest (NSC 2004), Sansanee Bunsanong, Thai Braille to ASCII Translator, February 2004.
- *Special Prize from Thailand Association of the Blind*, Software for the Blind, 6th National Software Contest (NSC 2004), Tirawot Suriyapaiboonwattana, Somchai Petchkrieng and Kongsakol Chomkong, Thai Braille Terminal Program on Linux, February 2004.

- *1st Prize, 7th National Software Contest (NSC 2005)*, Somchai Petkleang and Techit Panwasin, ASCII to Thai Braille Translator, February 2005.
- *Special Prize from Thailand Association of the Blind*, Software for the Blind, *7th National Software Contest (NSC 2005)*, Somchai Petkleang and Techit Panwasin, ASCII to Thai Braille Translator, February 2005.
- *1st Prize, 9th National Software Contest (NSC 2007)*, Aphisada Inthasara, Ladawan Mipansaen and Darika Marneechay, Braille-Music XML Translation, February 2007.
- *Special Prize from Thailand Association of the Blind*, Software for the Blind, *9th National Software Contest (NSC 2007)*, Aphisada Inthasara, Ladawan Mipansaen and Darika Marneechay, Braille-Music XML Translation, February 2007.
- *Consolation Prize, 9th National Software Contest (NSC 2007)*, Thanathip Limna, Chomphunut Sae-tang and Pongkan Kansong, Braille Operation Software, February 2007.
- *Consolation Prize, 10th National Software Contest (NSC 2008)*, Pornnalat Sornprasit and Jarunee Gampalawalee, Organizer and Internet Reader for the Visually Impaired, February 2008.
- *Consolation Prize, National Software Contest*, Thanapruet and , February 2010.
- *2nd Prize, 15th National Software Contest (NSC 2013)*, Wongpiti Whangsanti Yoschanin Sasiwat, and Attasuntorn Traisuwan, Hawkeye, February 2013.
- *3rd Prize, 16th National Software Contest (NSC 2014)*, Wongpiti Whangsanti Yoschanin Sasiwat, and Attasuntorn Traisuwan, Hawkeye Community, March 2014.
- *Consolation Prize, 17th National Software Contest (NSC 2015)*, Attasuntorn Traisuwan, Kraken Workflow, March 2015.

Other Contests

- *3rd Prize, Innovation of Thailand*, Sansanee Bunsanong, Thai Braille To ASCII Translator, October 2004, Impact Muangtong Thani.
- *3rd Prize, Embedded Systems on New Industrial Design Camp and Contest 2007*, Vorapol Thinnagonsutibut, Thanatip Limna, Suppachai Madue, Witchuda Kiatcharoensak and Nattawut Suwannarat, AmBraille: Braille Computer Notebook.
- *3rd Prize and Peer's Choice Award in Assistive & Rehabilitative Technology Student Design Challenge in 2nd International Convention on Rehabilitation Engineering & Assistive Technology (i-CREATe 2008)*, Vorapol Thinnagonsutibut, Thanatip Limna, Suppachai Madue and Witchuda Kiatcharoensak, Braille Computer Notebook, May 2008 at Imperial Queen's Park, Bangkok.

Thesis

- *Very good thesis of Faculty of Engineering*, Prince of Songkla University, 2009, Vorapol Thinnagonsutibut, On-the-fly Thai Braille and ASCII Translation.

Best Paper Awards

- *Best Paper Award in Application in Computer Engineering in 8th PSU-Engineering Conference (PEC-8)*, Saowalak Teeratananon and Pichaya Tandayya, Design and Analysis of Different Thai Character Arrangements for Keyboard on Screen (in Thai language), April 2009.
- *Best Paper Award in Technological Science in Payap University Research Symposium 2012*, Totsawat Chunhawitayatera and Pichaya Tandayya, Enhancing Thai Braille translation with n-gram for decision making in the cases of compound consonants, vowels and characters (in Thai language), Chiangmai, Thailand, 17th February 2012.

Others

- *Khondeesangkomthai of the Year 2009*, Sentangthai Magazine.
- *Model Lecturer in Research of the Year 2010*, Faculty of Engineering, Prince of Songkla University
- *Model Lecturer in Art and Culture Nourishment of the Year 2011*, Faculty of Engineering, Prince of Songkla University

17 Publications

Theses

1. Pichaya Tandayya, [*Further Developments in Civil Distributed Interactive Simulation Systems*](#), Ph.D. Thesis, University of Manchester, September 2000.
2. Pichaya Tandayya, *Application of DIS Communication Protocols in Spacecraft Simulation Systems*, M.Phil. Thesis, University of Manchester, May 1997.

Technical Reports

1. Pichaya Tandayya, Amornrat Phongdata, Unitsa Sangket, and Pitipol Meemak, Technical Report for *Building the Infrastructure of Biogrid with myGrid Technology*, 2008
2. Pichaya Tandayya, Wannarat Suntiamorntut, Suntorn Witosurapot, Chatchai Jantaraprim, and Wiraman Niyompol, Technical Report of *the Development of a Braille Computer System for the Visually Impaired*, 2007.
3. Pichaya Tandayya, Suntorn Witosurapot, Worraprot Chukumnird, Chatchai Jantaraprim, and Wiraman Niyompol, Technical Report of *the Development of a Braille Computer System for the Visually Impaired*, 2004.
4. Pichaya Tandayya, Technical Report of *the Development of a Distributed Interactive Simulation System*, 2002.
5. Pichaya Tandayya, Technical report of the *Development of a Call Processing Software at a Group Processor Module Level for a TDSS-1R Digital Telephone Exchange*, 1995.
6. Weerapan Musigasarn, Sinchai Kamolphiwong, Suntorn Witosurapot, Pichaya Tandayya, Thanate Kaorapapong, Montri Karnchanadecha, and Somchai Limsirorat, Technical report of the research project *Development of a Thailand's Digital Switching System for Rural Applications (TDSS-1R)* submitted to National Electronics and Computer Technology (NECTEC), National Science and Technology Development Agency (NSTDA), Advanced Telecommunication Research Laboratory (ATRL), November 1992.
7. Suntorn Witosurapot and Pichaya Tandayya, Technical report of the research project *ISDN Telecommunication Switching System*, Advanced Telecommunication Research Laboratory (ATRL), 1992.

Proceedings: Academic papers about Ethics

1. Pichaya Tandayya, Dimensions of Professional Ethics, In Proceedings of *the 12th International and National Conference on Engineering Education (INceed12)*, Khaoyai, Nakornnayok, Thailand, 15th -17th May 2014.
2. Pichaya Tandayya, Concepts and Guidelines for Ethical, Legal and Social Issues in Computer Profession, In Proceedings of *The 11th International and National Conference on Engineering Education (INceed11)*, Patong, Phuket, 9th -11th May 2013.
3. Pichaya Tandayya, [*Social and Professional Issues According to the IEEE Curricula*](#) (in Thai language), In Proceedings of *the 4th National Conference on Engineering Education 4 (Nceed4)*, pages 11-18, Nakornratchasima, Thailand, 4th -6th May 2006.

4. Pichaya Tandayya, [Teaching Experience in Ethical, Legal and Social Issues in Computer Profession](#) (in Thai language), In Proceedings of the 3rd National Conference on Engineering Education (Nceed3), Jomtien, Chonburi, Thailand, 5th -6th May 2005.

General Articles: Best Practice

1. Pichaya Tandayya, Best Practices in Quality of Graduates: Prized Student Works (in Thai Language), *Quality Forum of Prince of Songkla University*, pages 9-13, Quality Assurance Office, Prince of Songkla University, July 2007, ISBN 978-974-11-4866-0.

Journal Articles

1. Unitsa Sangket, Surakameth Mahasirimongkol, Pichaya Tandayya, Surasak Sangkhathat, Wasun Chantratita, Qi Liu and Yutaka Yasui, Parallelization of Logic Regression Analysis on SNP-SNP Interactions of a Crohn's Disease Dataset Model, *Journal Sains Malaysiana*, 2017 (To be published).
2. Thanathip Limna and Pichaya Tandayya, Workload Scheduling for Nokkhum Video Surveillance as a Service, Running on Infrastructure as a Service, *Multimedia Tools and Applications*, Springer (Journal Impact Factor: 1.331/2015), DOI: 10.1007/s11042-016-4225-1, pages xx, First online: 11 January 2017, ISSN 1573-7721, Print publication date: 15 February 2016, ISSN 1380-7501.
3. Kasikrit Damkliang, Pichaya Tandayya, Unitsa Sangket, and Ekawat Pasomsub, Integrated Automatic Workflow for Phylogenetic Tree Analysis Using Public Access and Local Web Services, *Journal of Integrative Bioinformatics*, 13(1):287, 2016. DOI:10.2390/biecoll-jib-2016-287. First online: 28 November 2016, ISSN 1613-4516. Online Journal: http://journal.imbio.de/index.php?paper_id=287.
4. Thanathip Limna and Pichaya Tandayya, A Flexible and Scalable Component-based System Architecture for Video Surveillance as a Service, Running on Infrastructure as a Service, *Multimedia Tools and Applications*, Springer, Volume 75, Issue 4, Pages 1765-1791, Online publication date: 31 December 2014, ISSN 1573-7721, Print publication date: 15 February 2016, ISSN 1380-7501 (Journal Impact Factor: 1.058/2013).
5. Pichaya Tandayya, Wannarat Suntiamorntut, Suntorn Witosurapot, Chatchai Jantaraprim, Worrarot Chukumnird, Vorapol Thinnagonsutibut, Thanathip Limna, Suppachai Madue, and Wirapol Niyomman, Computer Notebook with Thai and English Processing for the Visually Impaired, Selected Papers from the Japanese Conference on the Advancement of Assistive and Rehabilitation Technology, 23rd JCAART 2008, Niigata, *Assistive Technology Research Series*, IOS Press, Netherlands, Volume 28, May 2011, pages 166-172, ISBN 978-1-60750-757-4 (Editors: Ohnabe, H., Kubo, M., Collins, D.M., Cooper, R.A.).
6. Supattra Puttinaowarat, Krekchai Thongnoo, Pichaya Tandayya, Distributed Geographic Information System for Geocollaboration Applications: A Case Study of Flood in Amphoe Hat Yai, Songkhla Province (in Thai language), *Journal of Remote Sensing and GIS Association of Thailand*, Vol. 2, 2010.
7. Unitsa Sangket, Surakameth Mahasirimongkol, Wasun Chantratita, Pichaya Tandayya and Yurii S. Aulchenko, ParallABEL: An R Library for Generalized Parallelization of Genome-Wide Association Studies. *BMC Bioinformatics*, Volume 11:217, 29 April 2010, Available on-line at <http://www.biomedcentral.com/1471-2105/11/217> (Journal Impact Factor: 3.78/2010).
8. Pruittikorn Smithmaitrie, Jinda Kanjantoe and Pichaya Tandayya, Touching Force Response of the Piezoelectric Braille Cell, *Disability and Rehabilitation: Assistive Technology*, Volume 3, Issue 6, November 2008, pages 360 - 365, ISSN 1748-3107 (Journal Impact Factor: 0.038/2008).
9. Richard Zobel, Pichaya Tandayya, and Helmut Duerrast, Modelling and Simulation of the Impact of Tsunami Waves at Beaches and Coastlines for Disaster Reduction in Thailand, *International Journal of Simulation Systems, Science & Technology (Special Issue on:*

Modelling, Simulation and Decision Support), United Kingdom Simulation Society, Volume 7, Number 4 & 5, July 2006, pages 40-50, ISSN 1473-8031.

Books

Book Chapters

1. Thanathip Limna, Pichaya Tandayya, and Nikom Suvonvorn, *Stereo Vision Utilizing Parallel Computing for the Visually Impaired*, Book Chapter (Chapter 5), In "Rehabilitation Engineering", IN-TECH, 2009, book edited by Tan Yen Kheng, ISBN 978-953-7619-37-4, DOI: 10.5772/7392, Available on-line at intechweb.org (Published on: 2009-12-01).

Editors

1. Kasikrit Damkliang and Natjaree Prechaweerakul, *Taverna Installation and User Manual* (in Thai language), Editor: Pichaya Tandayya, Thai National Grid Center, 2008.

Proceedings: R&D

2017

1. Phutthewan Yangyuenyong, Aran Khunarree, Chalemchon Saekoo, Pichaya Tandayya and Thanathip Limna, A Distributed Simulation System for Training and Testing MOBA Game Programming, In Proceedings of *14th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2017)*, Phuket, Thailand, 27th – 30th June 2017 (To be published).

2015

2. Kritwara Rattanaopas and Pichaya Tandayya, Adaptive Workload Prediction for Cloud-based Server Infrastructures, In Proceedings of *2nd Advancement on Information Technology International Conference (ADVOCIT 2015)*, Krabi, Thailand, 3rd – 5th December 2015.
3. Kritwara Rattanaopas and Pichaya Tandayya, Performance Analysis of a Multi-Tier Video on Demand Service on Virtualization Platforms, In Proceedings of *19th International Computer Science and Engineering Conference (ICSEC 2015)*, Chiang Mai, Thailand, 23rd – 26th November 2015.
4. Kasikrit Damkliang, Pichaya Tandayya, Unitsa Sangket, Surakameth Mahasirimongkol, and Ekawat Pasomsab, An Efficient Process for Enhancing Genotype Imputation in Genome-wide Association Studies Using High Performance Computing, In Proceedings of *19th International Computer Science and Engineering Conference (ICSEC 2015)*, Chiang Mai, Thailand, 23rd – 26th November 2015.
5. Attasuntorn Traisuwan, Pichaya Tandayya and Thanathip Limna, Workflow Translation and Dynamic Invocation for Image Processing Based on OpenCV, In Proceedings of *12th International Joint Conference on Computer Science and Software Engineering (JCSSE 2015)*, Hat Yai, Songkhla, Thailand, 22nd – 24th July 2015.
6. Thanathip Limna and Pichaya Tandayya, Video Surveillance as a Service Cost Estimation and Pricing Model, In Proceedings of *12th International Joint Conference on Computer Science and Software Engineering (JCSSE 2015)*, Hat Yai, Songkhla, Thailand, 22nd – 24th July 2015, DOI: 10.1109/JCSSE.2015.7219791.
7. Vara Pulsawat and Pichaya Tandayya, Applying Ultrasonic Sensors for helping the visually impaired to discover objects in new area (in Thai language), In Proceedings of *7th ECTI-Conference on Application Research and Development (ECTI-CARD 2015)*, Trang, Thailand, 8th - 10th July 2015.

8. Kritwara Rattanaopas and Pichaya Tandayya, Comparison of Disk I/O Power Consumption in Modern Virtualization, In Proceedings of *2nd International Conference on Computer, Communication, and Control (I4CT 2015)*, Kuching, Sarawak, Sarawak, Malaysia, 21st - 23rd April 2015.

2014

9. Attasuntorn Traisuwan, Yoschanin Sasiwat, Wongpiti Wangsanti, Thanathip Limna and Pichaya Tandayya, Hawk Eye Community: an API for Nokkhum VSaaS, In Proceedings of *The 29th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2014)*, Phuket, Thailand, 1st - 4th July 2014.

2012

10. Thanathip Limna and Pichaya Tandayya, Approaches in Stereo Vision for Obstacle Location and Presentation for the Visually Impaired, In Proceedings of *2012 International Computer Science and Engineering Conference (ICSEC 2012)*, Pattaya, Thailand, 17th -18th October 2012.
11. Teerapon Chongpipattanasiri, Watcharin Kaewapichai, Pichaya Tandayya, Data Fusion of Stereo Vision and Ultrasonic Sensing for the Visually Impaired's Travelling Guide, In Proceedings of *2012 International Computer Science and Engineering Conference (ICSEC 2012)*, Pattaya, Thailand, 17th -18th October 2012.
12. Thanathip Limna and Pichaya Tandayya, Design for a Flexible Video Surveillance as a Service, In Proceedings of *5th International Conference on Image and Signal Processing (CISP 2012)*, Chongqing, China, 16th -18th October 2012, pages 222-226.
13. Kamonwan Pakdechote and Pichaya Tandayya, A New Web Interface for the Visually Impaired to Access Facebook, In Proceedings of *6th International Convention on Rehabilitative Engineering & Assistive Technology (i-CREATE 2012)*, Singapore, 24th- 26th July 2012.
14. Sureerat Kaewkeeree and Pichaya Tandayya, Enhancing the Taverna Workflow System for Executing and Analyzing the Performance of Image Processing Algorithms, In Proceedings of *9th International Joint Conference on Computer Science and Software Engineering (JCSSE 2012)*, Bangkok, Thailand, 30th May – 1st June 2012.
15. Teerapon Chongpipattanasiri, Watcharin Kaewapichai, and Pichaya Tandayya, The Stereo Vision and Distance Sensors Fusing for the Visually Impaired, In Proceedings of *10th International PSU Engineering Conference (IPEC-10)*, Songkhla, Thailand, 14th-15th May 2012.
16. Totsawat Chunhawitayatera and Pichaya Tandayya, Enhancing Thai Braille translation with n-gram for decision making in the cases of compound consonants, vowels and characters (in Thai language), In Proceedings of *Payap University Research Symposium 2012*, Chiangmai, Thailand, 17th February 2012, Best Paper Award in Technological Science.

2011

17. Unitsa Sangket, Surakameth Mahasirimongkol, Wasun Chantratita, Pichaya Tandayya, and Yurii S. Aulchenko, ParallABEL: an R library for speedup of GWAS applying parallel computing, In Proceedings of *10th International Conference on Bioinformatics and 1st International Society for Computational Biology-Asia (InCoB 2011/ISCB-Asia 2011)*, Kuala Lumpur, Malaysia, 30th November 30 – 2nd December 2011.

2010

18. Richard Zobel, Helmut Duerrast, and Pichaya Tandayya, [The Uniqueness of Adjacent Beaches for Tsunami Mitigation Efforts: A Case Study from Phuket, Thailand](#), In Proceedings of *2nd International Conference on Computational Intelligence, Modelling and Simulation*, Bali, Indonesia, 28th -30th September 2010, pages 407-411, ISBN: 978-0-7695-4262-1.

19. Saowalak Teeratananon and Pichaya Tandayya, Design and Analysis of Different Thai Character Arrangements for Keyboard on Screen (in Thai language), In Proceedings of 8th PSU-Engineering Conference (PEC-8), Songkhla, Thailand, 22nd -23rd April 2010, Best Paper Award in Applications in Computer Engineering.

2009

20. Pichaya Tandayya, Vorapol Thinnagonsutibut, Chatchai Jantaraprim, and Wiraman Niyompol, On-the-fly Braille and ASCII Thai Translation for PSU Braille Notebook, In Proceedings of 24th Japanese Conference on the Advancement of the Assistive and Rehabilitation Technology (24th JCAART), National Rehabilitation Center for Persons with Disabilities, Saitama, Japan, 26th -28th August 2009, pages 141-142.
21. Kasikrit Damkliang, Pichaya Tandayya, Ekawat Pasomsuba, Wasun Chantratita and Surakameth Mahasirimongkol, [Taverna Workflow for Validating Biomart Services](#), In Proceedings of 2009 International Conference on Computer Design and Applications (ICCCA 2009), 15th - 17th May 2009, pages 459-463, ISBN: 978-1-4244-4263-8.
22. Thanathip Limna and Pichaya Tandayya, [Enhancing the Pixel-to-Pixel Depth Discontinuities Algorithm Using MPI](#), In Proceedings of 6th International Joint Conference on Computer Science and Software Engineering (JCSSE2009), Phuket, Thailand, 13th – 15th May 2009, pages 86-90.
23. Thanathip Limna, Pichaya Tandayya and Nikom Suvanvorn, [Low-cost Stereo Vision System for Supporting the Visually Impaired's Walk](#), In Proceedings of 3rd international Convention on Rehabilitative Engineering & Assistive Technology (i-CREAtE 2009), Singapore, 22nd – 26th April 2009.
24. Kasikrit Damkliang, Pichaya Tandayya, Unitsa Sangket and Theerawut Phusantisampan, [Taverna Workflow and Supporting Services for Single Nucleotide Polymorphisms Analysis Gene Using Taverna](#), In Proceedings of 2009 International Conference on Information Management and Engineering (ICIME 2009), Kuala Lumpur, Malaysia, 3rd - 5th April 2009, pages 27-31, ISBN: 978-1-4244-3774-0.

2008

25. Pichaya Tandayya, Wannarat Suntiamorntut, Suntorn Witosurapot, Chatchai Jantaraprim, Worrarot Chukumnird, Vorapol Thinnagonsutibut, Thanathip Limna, Suppachai Madue, and Wiraman Niyompol, Computer Notebook with Thai and English Processing Support for the Visually Impaired, In Proceedings of 23rd Japanese Conference on the Advancement of the Assistive and Rehabilitation Technology (23rd JCAART), Niigata, Japan, 27th – 29th August 2008, pages 333-334.
26. Wiraman Niyompol, Pichaya Tandayya, Wichian Nantachaijitak, and Chaiya Intasoi, A Simple Text-based Method of Producing Math/Science Symbols or Musical Notes for Use in a Thai/English Braille Translation Software, In Proceedings of 2nd International Convention on Rehabilitation Engineering & Assistive Technology (i-CREAtE 2008), Bangkok, Thailand, 13th - 15th May 2008.

2007

27. Thitima Theppaya, Pichaya Tandayya and Chatchai Jantaraprim, [HLA-Based Distributed Interactive Simulation on Scilab](#) (in Thai language), In Proceedings of Thai Grid Computing Conference (TGCC 2007), Bangkok, Thailand, 23rd -24th August 2007.
28. Sairung Kaewsawang, Pornnarat Sornprasit, and Pichaya Tandayya, [Thai and English Braille Keyboard Ergonomic Analysis](#) (in Thai language), In Proceedings of The 5th PSU-Engineering Conference (PEC-5), Phuket, Thailand, 10th -11th May 2007, pages PEC5011-12-PEC5011-15.
29. Thanathip Limna, Chomphonut Sae-tang, Chatchai Jantaraprim, Pichaya Tandayya and Wiraman Niyompol, [Linux User Interface and Front-end Operation for the Visually Impaired](#), In Proceedings of the Inaugural International Convention for Rehabilitation Engineering &

Assistive Technology (i-CREAtE 2007), Singapore, 23rd – 26th April 2007, pages 179-184, ISBN 978-981-05-8075-9.

30. Aphisada Inthasara, Ladawan Mipansaen, Pichaya Tandayya, Chatchai Jantaraprim and Patimakorn Jantaraprim, [MusicXML to Braille Music Translation](#), In Proceedings of the *Inaugural International Convention for Rehabilitation Engineering & Assistive Technology (i-CREAtE 2007)*, Singapore, 23rd – 26th April 2007, pages 189-194, ISBN 978-981-05-8075-9.
31. Pongkan Kansong, Darika Marneechay, Pichaya Tandayya, Chatchai Jantaraprim, and Wiraman Niyompol, [Graphic User Interface and Front-end Operation on MS Windows](#), In Proceedings of the *Inaugural International Convention for Rehabilitation Engineering & Assistive Technology (i-CREAtE 2007)*, Singapore, 23rd – 26th April 2007, pages 52-56, ISBN 978-981-05-8075-9.
32. Pruittikorn Smithmaitrie, Jinda Kanjantoe and Pichaya Tandayya, Touching Force Response of the Piezoelectric Braille Cell, In Proceedings of the *Inaugural International Convention for Rehabilitation Engineering & Assistive Technology (i-CREAtE 2007)*, Singapore, 23rd – 26th April 2007, ISBN 978-981-05-8075-9.
33. Richard Zobel, Pichaya Tandayya, and Helmut Duerrast, Affordable Strategies for the Reduction of Future Tsunami Effects on Local Populations in Phuket, Krabi and Phang Nga, Southern Thailand, In Proceedings of *Asia Modelling & Simulation (AMS 2007)*, Phuket, Thailand, 27-30 March 2007, pages 75 – 81.
34. Thanathip Limna, Chomphunut Sae-tang, Pongkan Kansong, Darika Marneechay, Jomkwan Wijitpan, Totsawat Chunhawittayateera, Chatchai Jantaraprim, Pichaya Tandayya and Wiraman Niyompol, [Braille and XML Translation](#) (in Thai language), In Proceedings of *NSTDA Annual Conference (NAC 2007)*, Thailand Science Park, Thailand, 28th-30th March 2007, ISBN 978-974-229-150-1.

2006

35. Pichaya Tandayya, Suntorn Witosurapot, Chatchai Jantaraprim, Worraprot Chukumnird, and Wiraman Niyompol, [A Braille computer notebook with Thai and English processing capability for visually impaired people](#), In Proceedings of the *12th World Conference of the International Council for Education of People with Visual Impairment (ICEVI)*, Putra World Trade Centre, Kuala Lumpur, Malaysia, 16th-21st July 2006.
36. Vorapol Thinnagnosutibut, Chatchai Jantaraprim, and Pichaya Tandayya, [On-the-fly Braille and Thai Translation](#) (in Thai language), In Proceedings of the *2nd National Conference on Computing and Information Technology (NCCIT)*, King Mongkut's Institute of Technology North Bangkok, Thailand, 19th-20th May 2006.
37. Thitima Theppaya, Pichaya Tandayya and Chatchai Jantaraprim, [Integrating the HLA RTI Services with Scilab](#), In Proceedings of the International Workshop on Distributed Simulation on the Grid (DSGrid) organized under the 6th IEEE International Symposium on Cluster Computing and the Grid (CCGrid06), Singapore, 16th-17th May 2006.
38. Pichaya Tandayya, Watchara Tongruang and Alwaris Daragai, [Distributed Othello](#), In Proceedings of the *10th Annual National Symposium on Computational Science and Engineering (ANSCSE 10)*, pages 277-283, Chiangmai, Thailand, 22nd-24th March 2006, ISBN 974-656-924-4.

2005

39. Thitima Theppaya, Pichaya Tandayya and Chatchai Jantaraprim, [Integrating HLA with Scilab](#), In Proceedings of the *2005 Fall Simulation Interoperability Workshop (Fall SIW 2005)*, Orlando, Florida, USA, 18th-23rd September 2005, pages 89-94, ISBN 1-930638-40-1.
40. Somchai Petkleang and Pichaya Tandayya, [Thai Braille translation on Nfbtrans](#) (in Thai language), In Proceedings of *NSTDA Annual Conference (NAC 2005) "S&T in Thailand: Towards the Molecular Economy"*, Thailand Science Park Conference Centre, Thailand, 27th-30th March 2005.

2004

41. Sansanee Bunsanong and Pichaya Tandayya, [Thai Braille to ASCII Translation Program](#) (in Thai language), In Proceedings of *The 3rd PSU-Engineering Conference (PEC-3)*, Songkhla, Thailand, 8th -9th December 2004.
42. Atinat Palawan, Pichaya Tandayya, and Suntorn Witosurapot, [A simulation of the HLA infrastructure based on the ns network simulation tool](#), In Proceedings of *the 2004 European Simulation Interoperability Workshop (Euro-SIW)*, pages 53-61, Edinburgh, United Kingdom, 28th June - 1st July 2004, ISBN 1-930638-33-7.
43. Chirawat Wattanapanich and Pichaya Tandayya, [Distributed simulation of an emergency system for the flood disaster in Hat Yai, Thailand](#), In Proceedings of *18th European Simulation Multiconference (ESM2004)*, pages 187-192, Magdeburg, Germany, 13th-16th June 2004, ISBN 3-936150-35-4.

2003

44. Atinat Palawan, Pichaya Tandayya, and Suntorn Witosurapot, An Approach for Analyzing the HLA Performance with the NS Network Simulation Tool, In proceedings of *3rd International Symposium on Communications and Information Technology (ISCIT 2003)*, pages 675-679, Songkhla, Thailand, 3rd - 5th September 2003, ISBN 974-644-437-9.
45. Chirawat Wattanapanich and Pichaya Tandayya, Design of a Decision Support Simulation System in Case of Flooding with HLA, In proceedings of *3rd Information and Computer Engineering Postgraduate Workshop 2003 (ICEP2003)*, pages 94-98, Songkhla, Thailand, 30th-31st January 2003, ISBN 974-644-418-2.

2002

46. T. Keawmanee, K. Seubpradit, P. Tandayya, Development of a Distributed Road Traffic Simulation System, In Proceedings of *the 2002 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2002)*, volume 2, pages 1324-1326, Phuket, Thailand, 16th-19th July 2002, ISBN 974-628-917-9.
47. Saranyu Nako, Wiparat Intamane, Vorapol Thinnagonsutibut, [Prototype of a Computer Keyboard and Display Unit with Thai and English Braille Processing for the Visually Impaired](#) (in Thai language), In Proceedings of *1st PSU-Engineering Conference*, Faculty of Engineering, Prince of Songkla University, Songkhla, Thailand, 4th -5th July 2002.
48. Pichaya Tandayya, Totsaporn Keawmanee, Kaned Seubpradit, Jedsada Pengsuwan, Latthaphon Phorphon, [Distributed Simulation of a Road Traffic System Applying HLA](#), In Proceedings of *the 2002 European Simulation Interoperability Workshop (Euro-SIW)*, pages 99-103, London, United Kingdom, 24th-26th June 2002, ISBN 1-930638-24-8.

2001

49. J. Phengsuwan, L. Phorphon and P. Tandayya, [Distributed Simulation Application on High Level Architecture](#), In Proceedings of *International Symposium on Communications and Information Technology 2001 (ISCIT 2001)*, pages , 570-573, Chiangmai, Thailand, 14th-16th November 2001.

2000

50. Pichaya Tandayya and Richard Zobel, The Instant Model for a DIS Road Traffic Simulation System. In Proceedings of *14th European Simulation Multiconference (ESM2000)*, Editor: Rik Van Landeghem, pages 411-415, Ghent Belgium, 23rd-26th May 2000, ISBN 1-56555-204-0.

51. Pichaya Tandayya and Richard Zobel, Agent-Based Simulation in DIS Civil Systems. In Proceedings of *Workshop 2000 Agent-Base Simulation*, Editor: Christoph Urban, pages 199-204, Passau, Germany, 2nd-3rd May 2000, ISBN 1-56555-185-0.

1999

52. Pichaya Tandayya and Richard Zobel, An Approach to a Civil DIS System, In Proceedings of *Simulation in Industry: 11th European Simulation Symposium (ESS 99)*, Editors: Graham Horton and Dietmar Moeller and Ulrich Ruede, pages 569-573, SCS, Erlangen, Germany, 26th-28th October 1999, ISBN 1-56555-17-x.

1998

53. P. Tandayya and R. N. Zobel, VISTA Real-time Animation Software in a Distributed Spacecraft Simulation System, In Proceedings of *5th International Workshop on Simulation for European Space Programmes (SESP 98)*, pages 183-190, ESTEC, Noordwijk, The Netherlands, 3rd-5th November 1998, ISSN 1022-6656.

1997

54. Pichaya Tandayya and Richard Zobel, Application of DIS Communication Protocols in Spacecraft Simulation Systems, In Proceedings of *World Congress on Systems Simulation 97: Applications of Simulation*, Singapore, 1st - 3rd September 1997.
55. P. Tandayya and R. N. Zobel, Application of the VISTA Animation Software in Spacecraft Simulation Systems, In Proceedings of *Thai Academic Conference 1997*, UMIST, Manchester, UK, 22nd June 1997.

1995

56. Pichaya Tandayya and Weerapan Musigasarn, Object Oriented Call Processing Software at GPM Level for TDSS1-R Telephone Exchange, Electrical Engineering, In Proceedings of *18th Thailand's Electrical Engineering Conference*, Thailand, November 1995.

18 Theses and Dissertations under Supervision (main supervisor)

Graduated

Ph.D. Thesis in Molecular Biology and Bioinformatics

1. Unitsa Sangket, *Speeding up Genome-Wide Association Analyses Applying Parallel Computing*, 2011 (5110230013)
2. Thanathip Limna, *A Flexible Architecture for Video Surveillance as a Service Systems*, RGJ Scholarship. (5310130015/5910130041)

Master's Degree Theses in Computer Engineering

1. Chirawat Wattapanich, *Distributed Simulation of an Emergency System in case of Flood in Hat Yai*, 2004.
2. Atinat Palawan, *A Simulation of the High Level Architecture (HLA) Framework*, 2004.
3. Thitima Theppaya, *Development of a Distributed System of Scilab based on HLA*, 2007. (4612026)

4. Vorapol Thinnagonsutibut, *On-the-fly Thai Braille and ASCII Translation*, 2009. (4712027)
5. Kasikrit Damkliang, *Development of suitable workflows and Web services for SNP analysis*, 2009. (5010120123)
6. Thanatip Limna, *Applying Stereo Vision and Parallel Computing for Supporting the Journey of the Visually Impaired*, 2010. (5010120028)
7. Sureerat Kaewkeeree, *Enhancing the Taverna Workflow System for Designing and Executing Image processing Flow*, 2013. (5210120104)
8. Totsawat Chunhawitayatera, *Enhancing Thai Braille Translation with n-gram for Decision Making in the Cases of Compound Consonants, Vowels and Characters*, 2012. (5010120025)

Master of Science Minor Theses in Management of Information Technology

1. Ruchdee Binmad, *Management Information System for IT Training Center: A Case of Time Team Software Co., Ltd*, 2006.
2. Ratchaneewan Kovittayanun, *Using Geographic Information Systems: GIS to Create the Optimal Route for Distributing Goods*, 2005.
3. Suttipong Panitpotjaman, *A System for Monitoring & managing Sale Teams – Case Study: A Case Study of M.T.C. Auto Sales*, 2008.

In Progress

Ph.D. Theses in Computer Engineering

1. Kritwara Tattanaopas, *Reducing Power Consumption in Data Center Applying Virtualization*, PSU Graduate Study Scholarship. (5210130028/ 5810130038)
2. Kasikrit Damkliang, *A Smart Agent for Bioinformatic Workflows Orchestration*, PSU PhD 50/50 Scholarship. (5710130035)
3. Attasuntorn Traisuwan, *Designing and Testing Neuron Network Models in Deep Learning Enhancing Tensorflow.*, RGJ Scholarship. (5810130012)
4. Myint Zaw, *Social Network Sentiment Analysis*, ASEAN Scholarship (5910130012)

Master's Degree Theses in Computer Engineering

1. Taofik Lamsub, *Distributed File Retrieval System Applying Virtualization Technology*, Department Scholarship. (5710120068)
2. Thada Wangthammang, *Enhancing the Visualization of OpenTSDB Data Applying Caching*, 5-Year B-MEng Scholarship. (5810120061)