

Curriculum Vitae : Somporn CHUAI-AREE

(สมพร ช่วยอารีย์)

Name Somporn Chuai-Aree

Date of Birth September 30, 1974

Place of Birth Nakhon Si Thammarat, Thailand

Nationality Thai

Religion Buddhism

Marital Status Married

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Educational Background

Year	Degree	Institute	GPAX*
March 2001- June 2009	Dr. rer.nat. (Applied Mathematics)	University of Heidelberg, Heidelberg, Germany	Very good (Magna Cum Laude)
June 1998 – Oct 2000	M.Sc. (Computational Science)	Chulalongkorn University, Bangkok, Thailand	3.89
June 1993 – May 1997	B.Sc. 2 nd Class Honors (Applied Mathematics)	Prince of Songkla University, Pattani, Thailand	3.45

1990 - 1993	Senior High School (Maths and Science, emphasis on Agriculture)	Thung Song School, Nakhon Si Thammarat, Thailand	2.93
1987 - 1990	Junior High School (Maths and Science, emphasis on Agriculture)	Kuankoei Sutthivittaya School, Nakhon Si Thammarat, Thailand	2.92
1982 - 1987	Primary School	Wad Kuankoei School, Nakhon Si Thammarat, Thailand	-

*GPAX : Cumulative grade point average (2: C, 3: B, 4: A = very good)

Research Projects During Study

2008-Present	<p>Research in following fields :</p> <ol style="list-style-type: none"> 1. Plant growth modeling / Hairy root growth 2. Weather and ocean simulation / Tsunami Simulation (SiTPros) 3. Water flooding simulation 4. Coastal erosion 5. Modeling, simulation and visualization
2001-2008	<p>Modeling, Simulation and Visualization of Plants Growth : Prof. Jäger's Group "Applied Analysis" at IWR (Interdisciplinary Center for Scientific Computing), Ruprecht-Karls-Universität Heidelberg, Heidelberg, Germany Advisors: Prof. Dr. Dr. h.c. mult. Willi Jäger Prof. Dr. Dr. h.c. Hans Georg Bock</p>
1999-2000	<p>An Algorithm for Simulation and Visualization of Plant Shoots Growth (Very good in Master Thesis) Advisors: Assoc. Prof. Suchada Siripant Prof. Dr. Chidchanok Lursinsap</p>
1996-1997	<p>Database Management System for Student Affair of Faculty of Science and Technology, Prince of Songkla University, Pattani Campus (Very good in Senior Project) Advisors: Assist. Prof. Sunan Thongsrinuch Dr. Rattikarn Saelim</p>

Working experiences

September 2008 - Present	<p>Lecturer at Prince of Songkla University (PSU), Pattani campus</p> <p>Undergraduate Courses :</p> <ol style="list-style-type: none"> 1. Differential Equations (sometimes) 2. Introduction to Partial Differential Equations 3. Discrete Mathematics 4. Individual Projects 5. Seminar in Mathematics / Applied Mathematics 6. Current Issues in Sciences 7. Modern Technology 8. Physical Science <p>Master Courses :</p> <ol style="list-style-type: none"> 1. Design and Algorithm Analysis 2. Parallel Computing 3. Artificial Neural Networks 4. Mathematical Models 5. Master Thesis
May 1997 – March 2001	<p>Lecturer in Introduction to Computer, Introduction to Computer Programming, Operating System, Computer System, Information Technology and Mathematical Modeling for undergraduate students, Department of Mathematics and Computer Science, Faculty of Science and Technology, Prince of Songkla University, Thailand</p>
*June 1998 – Oct 2000	<p>Leave for M.Sc. (Computational Science), Chulalongkorn University, Bangkok, Thailand</p>
*March 2001 - 2008	<p>Leave for Ph.D. (Applied Mathematics), University of Heidelberg, Germany</p>

Scholarships and Awards During Study

2001- 2007	<p>Ph.D. Scholarship from the Royal Thai Government, Thailand (Ministry of Science and Technology, MOST)</p>
2001	<p>TAB Foundation Awards for Maximum GPAX (3.89) in M.Sc. (Computational Science)</p>

1999-2000	M.Sc. Scholarship from the Royal Thai Government, Thailand
1998-1999	TAB Foundation Scholarship, Chulalongkorn University, Bangkok, Thailand
1994-1996	B.Sc. Scholarship from the Royal Thai Government, Thailand (MOST)

Research Interests

Modeling, Simulation and Visualization of Plant Growth (in Agriculture), Lindenmayer systems (L-systems) and Inverse Problem of L-systems, Plant Model, Numerical Analysis, Image Processing, Computational Biology, Parallel Processing, Simulation and Optimization, Computational Science, 3D Visualization Programming, Artificial Neural Network (ANN), Fuzzy Logic, 3D Segmentation, Tsunami Problem, Ocean Wave Modeling, Weather Forecast Visualization, Coastal Erosion, Longshore Current.

Professional Positions

2012- Present	Deputer Director of the Office of Academic Resources, Prince of Songkla University, Pattani Campus, Thailand
2011- Present	Director of Pattani Bay Watch (PBWatch.NET) Project : Project for Participatory Natural Disaster Monitoring and Management (http://www.pbwatch.net)
2002 - Present	As a committee of Borijak Project supporting the scholarship for junior high school students in North-East Thailand.
2003	As a committee of 2 nd Thai Student Academic Conference (ThaiSAC2003), Aachen, Germany.
2002	As a committee of 1 st Thai Student Academic Conference (ThaiSAC2002), Stuttgart, Germany.
1995-1996	Student Representative of Student Union, Prince of Songkla University, Pattani Campus, Thailand.
1994-1995	Student Representative of Faculty of Science and Technology, Prince of Songkla University, Pattani Campus, Thailand.

Active Academic Research Projects (2011-2020)

1. Modeling the Effect of Hard Structures along the Coastline in Southernmost, Thailand (November 2018 - October 2020), Supported by CEM (Centre of Excellence in Mathematics, Thailand)
2. Simulation and Visualization of Sediment Transport in Pattani Bay (November 2018 - October 2020), Supported by CEM (Centre of Excellence in Mathematics, Thailand)
3. Coastal Erosion in Lower Southern Gulf of Thailand (November 2017 - October 2019), Supported by CEM (Centre of Excellence in Mathematics, Thailand)

4. Temperature Change in Thailand (November 2017 - October 2019), Supported by CEM (Centre of Excellence in Mathematics, Thailand)
5. Solar Renewable Energy Research (November 2016 - October 2018), Supported by CEM (Centre of Excellence in Mathematics, Thailand)
6. Flood and Risk Management Research (November 2016 - October 2018), Supported by CEM (Centre of Excellence in Mathematics, Thailand)
7. An Integrated Flood Disaster Management Information System: A Case Study of Songkhla Province (October 2015 – September 2016), Supported by NRCT
8. Participatory Flood Prediction and Evaluation Systems : The Application in Nathawi-Chana Sub-basin (Head of Project, October 2015 – September 2016), Supported by NRCT
9. Spatial Model for Participatory Flood Problem Management, A Case Study of Nathawi-Chana Sub-Basin (Head of Project, December 2013 - March 2015)
10. Saiburi Basin Project (Phase II) - (Strategic Plan Manager of Project, July 2011 - August 2013)
11. Model for Participatory Sustainable Coastal Resources Management in Pattani Bay (Head of Project, November 2012 - September 2013, Supported by STEP Project)
12. Model for Participatory Monitoring and Natural Disaster Warning System in Three Southernmost Provinces of Thailand (Head of Project, July 2011 - May 2013, Supported by STEP Project)
13. PBWatch.NET Project (Head of Project, January 2011 - , Supported by RDH, Institute of Research and Development for Health of Southern Thailand)

Publications of S. Chuai-Aree *et al.*

Research Proceedings / Conferences:

1. Thumhiwaid, K., **Chuai-Aree, S.**, Phon-On, A., Numerical Algorithm for Simulation and Visualization of Landslide by Water Content and Slope Factors, Proceedings of the 20th International Annual Symposium on Computational Science and Engineer, pp. 31 – 44, July 27-29, Bangkok, Thailand, 2016.
2. Pongsiri, N. and **Chuai-Aree, S.** Mathematical Simulation and Visualization of Sediment Distribution at Bandon Bay in Surat Thani. The 21st Annual Meeting in Mathematics & Annual Pure and Applied Mathematics Conference (AMM&APAM 2016), Chulalongkorn University, pp.291-301, May 23-25, 2016, Bangkok (Thailand).
3. Ulfah, S. and **Chuai-Aree, S.** Modeling, Simulation and Visualization of Air Pollution Distribution Using an Advection-Diffusion Model. Annual Int'l Conference on Intelligent, Computer Science & Information Systems (ICCSIS-16), pp. 189-193, April 28-29, 2016, Pattaya (Thailand).

4. **Chuai-Aree, S.**, Siripant, S., Jäger, W., Bock, H. G., Fast Algorithm for Cloud Segmentation and Cloud Classification from Satellite Images and Applications, 6th Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2015), March 16-20, Hanoi, Vietnam, 2015.
5. A. Busaman, K. Mekchay, S. Siripant, **S. Chuai-Aree**, Dynamically Adaptive Tree Grids Modeling of Flood Inundation Based on Shallow Water Equation, 6th Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2015), March 16-20, Hanoi, Vietnam, 2015.
6. R. Buesa, S. Siripant, K. Plaimas, **S. Chuai-Aree**, A. Phon-On, Cloud Movement and Storm Direction Analysis Using Optical Flow Method, 6th Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2015), March 16-20, Hanoi, Vietnam, 2015.
7. A. Boosamun, K. Mekchay, S. Siripant and **S. Chuai-Aree**. Modeling for Simulation and Visualization of Flood on Adaptive Tree Grids, Proc. of 9th Conference on Science and Technology for Youths, March 30- June 1, Bangkok, Thailand, 2014.
8. **Chuai-Aree, S.**, Mathematics and Natural Disaster, AMM2013 conference, Mar 14-16, 2013, Krabi, Thailand (Invited Keynote Speaker)
9. **Chuai-Aree, S.**, Mathematical Tools for Flood Simulation and Visualization on Google Earth for Flood Management, APEC-Tsukuba conference, Feb 14-17, 2013 Japan (Invited Keynote Speaker)
10. **Chuai-Aree, S., Kanbua, W.** Rainfall Report System Using Radar Image Processing and Weather Information for Participatory Disaster Monitoring and Management on GIS, Proceeding of the IMPAC-T Workshop : Integrated study on Hydro-Meteorological Prediction and Adaptation to Climate Change in Thailand, Held at Thai Meteorological Department, Thailand, January 28-29, 2013
11. W. Kanbua, **S. Chuai-Aree**, Decision Support System for Flood Warning System By using Artificial Neural Network, Proceeding of the IMPAC-T Workshop : Integrated study on Hydro-Meteorological Prediction and Adaptation to Climate Change in Thailand, Held at Thai Meteorological Department, Thailand, January 28-29, 2013
12. **Chuai-Aree, S.**, PBWatch Weather Report System for Participatory Disaster Monitoring and Management, ICAS 2012 : 2nd USM-PSU International Conference on Art and Sciences, 2-4 December 2012, Penang, Malaysia, 2012. (Invited keynote speaker)
13. **Chuai-Aree, S.**, Siripant, S., Jäger, W., Bock, H. G., Algorithm for Plant Growth Measurement Using RGM and VGM, 5th Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2012), March 5-9, Hanoi, Vietnam, 2012.
14. Busaman, A., **Chuai-Aree, S.**, Siripant, S., Kanbua, W., Algorithm and Software for Simulation and Visualization of Water Flooding in Thailand Based on Shallow Water Equation, 5th Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2012), March 5-9, Hanoi, Vietnam, 2012.

15. Ritaksa, S., Siripant, S., **Chuai-Aree, S.**, Modeling and Visualization of Blood Flow, 5th Intern. Conf. on High Performance Scientific Computing (HPSC Hanoi 2012), March 5-9, Hanoi, Vietnam, 2012.
16. Chingchuang, H., **Chuai-Aree, S.** and Musikasuwan, S.(2011), Automatic 3D Fruits Surface Reconstruction Using Multiple Images , 15th Intern. Annual Symposium on Computational Science and Engineering, 30 March - 2 April, 2011, Bangkok, Thailand.
17. **Chuai-Aree, S.**, Boosaman, S., Siripant, S. and Kanbua, W.(2011), Flood Simulation and Visualization Using Parallel Computing , 15th Intern. Annual Symposium on Computational Science and Engineering, 30 March - 2 April, 2011, Bangkok, Thailand.
18. Kanbua, W., Khetchaturat, C. and **Chuai-Aree, S.** (2011), WAM-ANN Hincast Wind Wave Climatology for The Gulf of Thailand and Andaman Sea , 15th Intern. Annual Symposium on Computational Science and Engineering, 30 March - 2 April, 2011, Bangkok, Thailand.
19. Busaman, A., **Chuai-Aree, S.** and Kanbua, W.(2010), VirtualFlood3D : An Algorithm for Modeling, Simulation and Visualization of Flooding, Second Asian Head of Research Councils (ASIAHORCs) Joint Symposium, 1-2 November, 2010, Kuala Lumpur, Malaysia.
20. W. Kanbua, S. Chuai-Aree, Wind-Wave and Tsunami Model in Thailand, Proceeding of Second Asian Heads of Research Councils (ASIAHORCs) Joint Symposium, held on 1-2 November 2010 at Impiana KLCC Hotel, Kuala Lumpur, Malaysia.
21. Busaman, A., **Chuai-Aree, S.** and Kanbua, W., VirtualFlood3D : Software for Simulation and Visualization of Water Flooding, 14th Intern. Annual Symposium on Computational Science and Engineering, 24-25 March, 2010, Chiangrai, Thailand.
22. **Chuai-Aree, S.**, Siripant, S. and Jäger, W.(2010), Automatic Measurement of Plant Growth Using Region Growing Method, 14th Intern. Annual Symposium on Computational Science and Engineering, 24-25 March, 2010, Chiangrai, Thailand.
23. **Chuai-Aree, S.** and Kanbua, W.(2010), KML Generator for Visualizing of Numerical Results from Weather and Ocean Wave Simulation in Google Earth API, 14th Intern. Annual Symposium on Computational Science and Engineering, 24-25 March, 2010, Chiangrai, Thailand.
24. Kanbua, W. and **Chuai-Aree, S.**, Analysis of Coastal Erosion by Using Wave Spectrum, 14th Intern. Annual Symposium on Computational Science and Engineering, 24-25 March, Chiangrai, Thailand, 2010
25. W. Kanbua ,C. Khetchaturat, S. Chuai-Aree, Analysis of Coastal Erosion by Using Wave Spectrum, Proceeding of the Symposium on Sustainable Water Resource Management and Climate Change Adaptation, Nakhon Pathom Rajabhat University, Nakhon Pathom, Thailand, 16 - 17 June 2010.

26. Ritraksa, S., **Chuai-Aree, S.** and Saelim, R.(2010), Structural Model of Blood Vessels in Heart Using Lindenmayer Systems, 14th Intern. Annual Symposium on Computational Science and Engineering, 24-25 March, Chiangrai, Thailand, 2010
27. Charawae, N., **Chuai-Aree, S.** and Wikaisuksakul, S.(2010), Online Object Detection Program Using Fast Image Processing, 14th Intern. Annual Symposium on Computational Science and Engineering, 24-25 March, Chiangrai, Thailand, 2010
28. **S. Chuai-Aree**, M. Srisombat, M. Sirinupong, S. Suanphairoch, S. Siripant, W. Jäger and H. G. Bock : ALGM : An Algorithm for Leaf Growth Measurement Using Region Growing Method, Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2009), March 2-6, Hanoi, Vietnam, 2009.
29. W. Kanbua , **S. Chuai-Aree** : The Simulation of Wave model Under North-East Monsoon Along Coastline of Thailand, Japan - Thailand Estuary Workshop 2008 , Venue: Thai Meteorological Department , Bangkok, Thailand , Period: August 19 - 20, 2008
30. W. Kanbua , **S. Chuai-Aree** : Ocean Wave Simulation Under North-East Monsoon Effect in the Gulf of Thailand, 13th National Convention on Civil Engineering , Venue: Pattaya, Chon Buri, Thailand , Period: May 14 - 16, 2008
31. W. Kanbua , **S. Chuai-Aree** : Tsunami Propagation Prediction by SiTProS Model, INTERNATIONAL SYMPOSIUM ON THE RESTORATION PROGRAM FROM GIANT EARTHQUAKES AND TSUNAMIS , Venue: Royal Phuket City Hotel, Phuket, Thailand , Period: January 22-24, 2008
32. **S. Chuai-Aree**, W. Kanbua : SiTProS: Fast and Real-Time Simulation of Tsunami Propagation, AMS2007: Asia Modelling Symposium international conference, Phuket, Thailand, March 27-30, 2007.
33. W. Kanbua, **S. Chuai-Aree** : Understanding the Simple Model of Tsunami Propagation by SiTProS Model, The 11th Annual National Symposium on Computational Science and Engineering (ANSCSE11), Phuket, Thailand, March 28-30, 2007.
34. **S. Chuai-Aree**, S. Siripant, W. Jäger, H. G. Bock : PlantVR: Software for Simulation and Visualization of Plant Growth Model , PMA06: The Second International Symposium on Plant growth Modeling, Simulation, Visualization and Applications, Beijing (CHINA PR), November 13-17, 2006.
35. **S. Chuai-Aree**, S. Siripant, W. Jäger, H. G. Bock : An Algorithm for Simulation of Leaf Vein, Shoot and Root Growth Based on Their Environmental Factors , PMA06: The Second International Symposium on Plant growth Modeling, Simulation, Visualization and Applications, Beijing (CHINA PR), November 13-17, 2006.
36. S. Siripant, **S. Chuai-Aree**: Simulation and Visualization of Leaf Growth , Proc. of Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2006), March 6-10, Hanoi, Vietnam, 2006.

37. H. G. Bock, S. **Chuai-Aree**, W. Jäger, W. Kanbua, S. Krömker, S. Siripant: 3D Cloud and Storm Reconstruction from Satellite Image , Proc. of Intern. Conf. on High Performance Scientific Computing (HPSC Hanoi 2006), March 6-10, Hanoi, Vietnam, 2006.
38. H. G. Bock, S. **Chuai-Aree**, W. Jäger, S. Siripant: Inverse Problem of Lindenmayer Systems on Branching Structures , Proc. of Intern. Conf. on High Performance Scientific Computing (HPSC Hanoi 2006), March 6-10, Hanoi, Vietnam, 2006.
39. S. **Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Reconstruction of Branching Structures Using Region and Volume Growing Method International Conference in Mathematics and Applications (ICMA-MU 2005) , Bangkok, Thailand, December 15-17, 2005.
40. W. Kanbua, S. **Chuai-Aree**: Virtual Wave : an Algorithm for Visualization of Ocean Wave Forecast in the Gulf of Thailand. The 2nd International Symposium on Mathematical, Statistical and Computer Sciences , Bangkok, Thailand, February 19-20, 2005.
41. S. **Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Modeling, Simulation and Visualization of Plant Root Growth and Diffusion Processes in Soil Volume. Proc. of 4TH International Workshop on Functional-Structural Plant Models , Montpellier, France, June 7-11, 2004, pp. 289-293.
42. S. **Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: PlantVR: Software for simulation and visualization of a model for plant growth. Proc. of 4TH International Workshop on Functional-Structural Plant Models , Montpellier, France, June 7-11, 2004, pp. 418.
43. S. **Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant, C. Lursinsap: PlantVR : An Algorithm for Generating Plant Shoot and Root Growth Using Applied Lindenmayer Systems. In B.Hu and M. Jaeger (eds.): Proc. of 2003' Intern. Symposium on Plant growth Modeling, simulation, visualization and their Applications , Tsinghua University Press - Springer Verlag, October 13-16, Beijing, China, pp. 55-68, 2003.
44. S. **Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Simulation and Visualization of Plant Growth using Lindenmayer Systems, Proc. of Intern. Conf. on High Performance Scientific Computing (HPSC), March 10-14, Hanoi, Vietnam, 2003.
45. S. **Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Smooth Animation for Plant Growth Using Time Embedded Component and Growth Function. In N. V. Sanh, Y. Lenbury, Y. H. Wu and B. Wiwatanapataphee (eds.): Proc. of Intern. Conf. on Computational Mathematics and Modeling, May 22-24, Thailand, in East-West Journal of Mathematics, special volume, pp. 285-295, 2002.
46. **Chuai-Aree**, S., Siripant, S. and Lursinsap, C., "Animating plant growth in L-system by parametric functional symbols", Proc. of Intern. Conf. on Intelligent Technology 2000, December 13-15, Assumption University Bangkok, Thailand, pp. 135-143, 2000.

47. **Chuai-Aree, S.**, Lursinsap, C., Sophatsathit, P. and Siripant, S., "Fuzzy C-Mean: A statistical feature classification of text and image segmentation method", Proc. of Intern. Conf. on Intelligent Technology 2000, December 13-15, Assumption University Bangkok, Thailand, pp. 279-284, 2000.

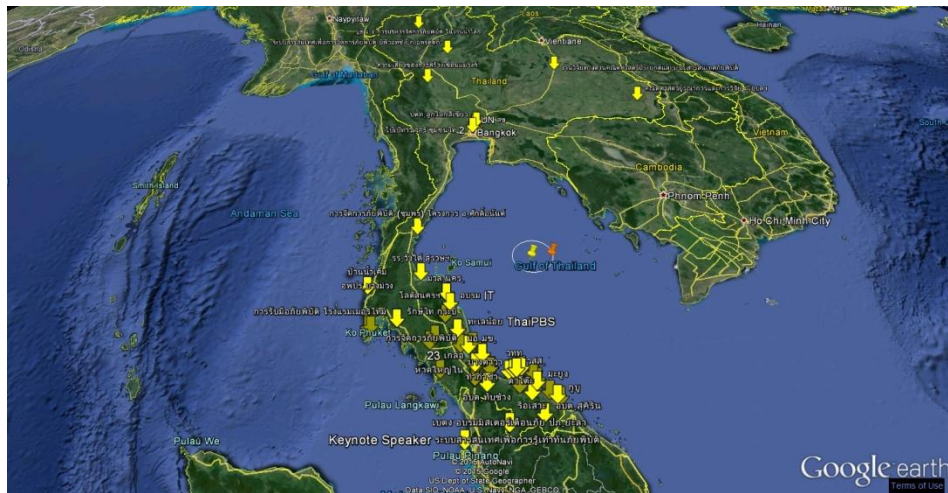
Research Journals / Selected Paper in Important Proceedings:

1. Eso, M., Kuning, M., **Chuai-Aree, S.** (2015): Analysis of daily rainfall during 2001-2012 in Thailand Songklanakarin J. Sci. Technol. 37 (1), pp 81-88
2. Busaman, K. Mekchay, S. Siripant and **S. Chuai-Aree**. Dynamically adaptive tree grids modeling for simulation and visualization of rain-water overland flow. Preprint submitted to International Journal for Numerical Methods in Fluids, 2015.
3. Khetchaturat C, Wongsupap C, **Chuai-aree S**, Srerungla A, Kanbua W, Monitoring Coastal Erosion by Using Wave Spectrum in the Case of Constructions of Small Islands Offshore Songkhla Coast. J Marine Sci Res Dev, 4:146. doi: 10.4172/2155-9910.1000146, 2014
4. **S. Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Inverse Problem of Lindenmayer Systems on Branching Structures, Proc. of Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2006), Modeling, Simulation and Optimization of Complex Processes, Springer Berlin Heidelberg, pp 163-185, DOI 10.1007/978-3-540-79409-7_11, 2006.
5. **S. Chuai-Aree**, W. Jäger, H. G. Bock, S. Krömker, W. Kanbua, S. Siripant: 3D Cloud and Storm Reconstruction from Satellite Image, Proc. of Intern. Conf. on High Performance Scientific Computing (HPSCHanoi 2006), Modeling, Simulation and Optimization of Complex Processes, Springer Berlin Heidelberg, DOI 10.1007/978-3-540-79409-7_12, 2006.
6. **S. Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Reconstruction of Branching Structures Using Region and Volume Growing Method, East-West Journal of Mathematics, Special Volume, 2005.
7. Kanbua, W. and **Chuai-Aree, S.** : Virtual Wave : An Algorithm for Visualization of Ocean Wave Forecast in the Gulf of Thailand, KMITL Science Journal Vol.5, No.1 Feb.2005, 140-150, 2005
8. **S. Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Simulation and Visualization of Plant Growth Using Lindenmayer Systems. In H. G. Bock, E. Kostina, H. X. Phu and R. Rannacher (eds.): Modeling, Simulation and Optimization of Complex Processes, Springer-Verlag Berlin Heidelberg , DOI 10.1007/3-540-27170-8_9, pp. 115-126, 2005.
9. Rodkeaw, Y., **Chuai-Aree, S.**, Lursinsap, C., Sophatsathit, P. and Siripant, S. and Chongstitvatana, P.: Animating Plant Growth in L-System by Parametric Functional Symbols, International Journal of Intelligent Systems, Vol. 19(1-2), (2004), pp. 9-23.

10. **S. Chuai-Aree**, W. Jäger, H. G. Bock, S. Siripant: Smooth Animation for Plant Growth Using Time Embedded Component and Growth Function, East-West Journal of Mathematics, Special Volume, pp. 285-295, 2002.
11. **Chuai-Aree, S.**, Lursinsap, C., Sophatsathit, P. and Siripant, S., Fuzzy C-Mean: A statistical feature classification of text and image segmentation method, International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, Vol. 9(6), (2001), pp. 661-671, World Scientific Publishing Company.

Academic Service for Local Communities:

1. Invited Speaker in Local Communities on Participatory Natural Disaster Monitoring and Management in the following places (50-60 places):



2. Invited Speaker in Local Communities on Alternative Sustainable Energy (10-20 places):

TV, Magazines and Newspapers:

1. Stuttgart Newspaper, February 2, 2007 (in German) (<http://www.schuai.net/VirtualCloud3D/Kyriill/STN/Kyriill.pdf>)
2. Uni-Heidelberg Pressemitteilungen "Wolkenwirbel mit Bergen und Schluchten", January 31, 2007 (in German) (<http://www.uni-heidelberg.de/presse/news07/2701kyri.html>)
3. Tsunami News , 100 watts, 2005 (in Thai) (<http://www.iwr.uni-heidelberg.de/groups/ngg/People/schuai/Somporn.NET/Thaiarticles/WarningTsunami.pdf>)
4. List of TV Report, (<http://www.schuai.net/SiTProS/TV>)
5. "มนุษย์ไซลาร์เซลล์" <https://www.facebook.com/Posttoday/posts/10153176005839835>

6. สถานการณ์หมอกควันภาคเหนือ <https://www.youtube.com/watch?v=X7vymkWYQ5U> Mar 16, 2015 พลเมืองTalk :
วิเคราะห์สถานการณ์หมอกควัน กับ ดร.สมพร ช่วยอารีย์
7. เปิดหน้ากากคุยกับ ดร.สมพร ช่วยอารีย์ ปัญหาหมอกควันนี้จะแก้ไขอย่างไรกัน
<http://www.citizenthaipbs.net/node/4967>
8. นวัตกรรมพลังงานทางเลือก ทางช่อง ททบ. 5
<https://www.facebook.com/hudsonandsiriporn.sirisuwapong/posts/795395413880642>
9. รายการพลังงานทางเลือกกับ ดร.สมพร ช่วยอารีย์ <http://oarchannel.oas.psu.ac.th/tags/ดรสมพร-ช่วยอารีย์>
10. พลังงานทางเลือกกับ ดร. สมพร ช่วยอารีย์ จำนวน 6 ตอน
https://www.youtube.com/watch?list=PLaPNL6FaTBPxHBSazYg LH8Y04ztVnLg0c&v=AKszhN4510A&feature=player_embedded
11. ค้นในกูเกิ้ล "สมพร ช่วยอารีย์" หรือ "Somporn Chuai-Aree"

รางวัลด้านวิชาการ/วิจัยที่ได้รับ

1. เกียรติบัตรเชิดชูเกียรติสำหรับนักวิจัยที่ได้รับรางวัลทั้งระดับชาติและนานาชาติ ปี พ.ศ. 2555 ในงานวันนักวิจัยและนวัตกรรม มอ. ครั้งที่ 7 วันที่ 17 มิถุนายน 2556
2. รางวัลชนะเลิศถ้วยพระราชทาน สมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี “รางวัล Platinum Award” ประจำปี 2555 ในการประกวด “การนำเสนอผลงานวิจัยแห่งชาติ 2555” (Thailand Research Expo 2012) ผลงานเรื่อง ระบบสารสนเทศเพื่อการสนับสนุนการเฝ้าระวังภัยธรรมชาติแบบมีส่วนร่วม (PBWatch.NET)
3. รางวัลผลงานวิจัยเด่น สกว. ประจำปี 2555 โดยทีมวิจัยสูมน้ำสายบุรี

ทุนสนับสนุนการวิจัยสำหรับนักศึกษา

นักศึกษาระดับปริญญาโท

1. Model for Participatory Monitoring and Natural Disaster Warning System in Three Southernmost Provinces of Thailand (Head of Project, July 2011 - May 2013, Supported by STEP Project) จำนวน 2 ทุน
2. Model for Participatory Sustainable Coastal Resources Management in Pattani Bay (Head of Project, November 2012 - September 2013, Supported by STEP Project) จำนวน 2 ทุน

เว็บไซต์และบทความอื่นๆ ที่ได้พัฒนาและเกี่ยวข้อง

1. Blogs / Articles (in Thai)
2. FaceBook : <http://www.facebook.com/csomporn> ขับเคลื่อนความคิด พลังงานทางเลือก ภัยพิบัติ
3. PBWatch.NET <http://www.pbwatch.net> รายงานสถานการณ์อากาศ
4. 2D PBWatch.NET <http://www.pbwatch.net/3D> รายงานสถานการณ์อากาศสามมิติ
5. 3D PBWatch.NET <http://www.pbwatch.net/2D> รายงานสถานการณ์อากาศสองมิติ
6. Facebook : Somporn Chuai-Aree, Pattani Bay Watch, ชุมชนคนอาทิตย์อุทัยพลังงานทางเลือก
7. Youtube : <http://www.youtube.com/user/csomporn>

8. บล็อกมิสเตอร์ช่วย <http://gotoknow.org/blog/mrschuai>
9. บล็อกลานคณิตศาสตร์ <http://gotoknow.org/blog/lan-maths>
10. บล็อกลานคำใต้ : แผลงใต้วันละ(หลาย)คำ <http://gotoknow.org/blog/hlaengtai>
11. บล็อกลานคอมبودดา <http://gotoknow.org/blog/combudda>
12. หน้ารวมบล็อก <http://gotoknow.org/profile/mrschuai>