

Curriculum Vitae

Kuo-pao Yang

Department of Computer Science
Southeastern Louisiana University

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EDUCATION:

01/95 – 07/03 Ph.D., Computer Science, Illinois Institute of Technology, Chicago, Illinois
09/93 – 12/94 M.S., Computer Science, Illinois Institute of Technology, Chicago, Illinois
09/86 – 06/91 B.S., Computer Science, Tamkang University, Taipei, Taiwan, R.O.C.

RESEARCH INTERESTS:

Computer Architecture, Programming Languages, Expert Systems

TEACHING EXPERIENCE:

2014 – Present Professor, Department of CS/IT, Southeastern Louisiana University
2009 – 2014 Associate Professor, Department of CS/IT, Southeastern Louisiana University
ISAT 771 – Research Project
ISAT 770 – Thesis
CMPS481 – Seminar
CMPS431 – Operating Systems
CMPS401 – Survey Programming Languages
CMPS375 – Computer Architecture
CMPS293 – Introduction to Assembly Language
CMPS290 – Computer Organization
CMPS161 – Algorithm Design and Implementation I
2003 – 2009 Assistant Professor, Department of CS/IT, Southeastern Louisiana University
CMPS 481 – Seminar
CMPS 431 – Operating Systems: Write programs in FreeBSD (C language) and MS Windows (jBACI and Java)
CMPS 401 – Survey Programming Languages: Write programs in OpenVMS (COBOL and FORTRAN), FreeBSD (C, JavaScript, PHP + HTML + MySQL, and PERL+ HTML + MySQL, Python, Lua), and MS Windows (C#)
CMPS 390 – Data Structures: Write programs in Java
CMPS 375 – Computer Architecture: Draw schematic captures and write VHDL programs using Altera software; fabricate and demonstrate a simple processor on Altera DE2 board
CMPS 293 – Introduction to Assembly Language: IA-32 Processor Architecture
CMPS 290 – Computer Organization
CMPS 280 – Algorithm Design and Implementation II: Advanced Java
CMPS 225 – Software Applications: MS Excel
CMPS 161 – Algorithm Design and Implementation I: Basic Java
CMPS 110 – Computer Literacy: MS Office
CMPS 101 – Introduction to Computer Science: Alice
2000 – 2003 Instructor, Department of Computer Science, Illinois Institute Technology

- CS 402 – Introduction to Advanced Studies II: Computer Architecture and Programming Languages, MISP Assembly, VHDL, Java, C++, MFC
- CS 401 – Introduction to Advanced Studies I: Data Structures in C++ language
- 1999 – 2000 Instructor, Department of Computer Science, Chicago State University
 - CPTR 307 – Data Structures: Write programs in C language
 - CPTR 106 – Introduction to Personal Computers: MS Office
- 1998 Instructor, Department of Computer Science, East-West University
 - CI 321 – Computer Operating Systems
- 1996 – 1998 Teaching Assistant, Department of Computer Science, Illinois Institute of Technology
 - CS 570 – Comparative Computer Architecture: Advanced Computer Architecture
 - CS 471 – Computer Architecture II: Design and Implement 8-bit CPU in VHDL using Altera Maxplus II software; fabricate and demo 8-bit CPU on Altera UP1 board
 - CS 470 – Computer Architecture I: MIPS Architecture
 - CS 350 – Computer Organization: MIPS 2000 assembly; 8-bit CPU in schematic capture using Altera Maxplus II software and then demo on UP1 board
- 1995 – 1996 Research Assistant, Department of Computer Science, Illinois Institute of Technology
 - John Deere Inc., Health Project in Clips

HONORS/AWARDS:

Meritorious Student/Faculty Paper Award: Edwards, V., Courtney, M., and Yang, K.P., “A FPGA Paint Brush Application,” *Information Systems Education Conference (ISECON)*, Phoenix, Arizona, November, 2008.

Science and Technology Awards for Research (STAR) at Southeastern Louisiana University (12 funded grants with students):

	Funded STAR Proposals (2008 - 2016)	Students	Faculty Sponsor	Faculty Co-Sponsor
1	Capture the Flag	Banks, R. and Fontenot, M.	Yang, K.P.	
2	Quadzilla	Clapp, C., Dolan, N., Badon, J., and Raygadas, D.	Yang, K.P.	Alkadi, G.
3	On the Possibility of Making People Happier Using Audio and Visuals	Dahal, D.	Yang, K.P.	Burris, J.
4	KeepNEye 2.0	Bhatarai, D., Gautam, B., Fontenot, C., and Elliott, S.	Yang, K.P.	
5	CarBot, a Robotic Vehicle Using the Altera DE2 Circuit Board	Wallace, K., Nguyen, H., and Martin, J.	Yang, K.P.	
6	Mobile Uni-Dextrous Robot (MUDR)	De Armond, J., Morvant, C. and Miles, J.	Yang, K.P.	
7	Graphical and Functional Redesign of Existing Southeastern Louisiana University Computer Science Course Assessment with Respect to ACM Core Curriculum Topics	Gill, M., and Pierson, R.	Beaubouef, T.	Yang, K.P.
8	Online Class Assessment Website	Lancaster, J., and Riggio, A.	Beaubouef, T.	Yang, K.P.
9	OMDOC	Hyatt, A., Halvorson, K., and Magee, S.	Zhang, W.	Yang, K.P.
10	Representing Geometric Algebra Using OMDoc	Watts, M. and Shrestha, R.	Zhang, W.	Yang, K.P.
11	Java Internet Application	McCoy, B. and Edwards, V.	Yang, K.P.	
12	Converting Database to Internet	Hawkins, W. and Godfrey, C.	Yang, K.P.	

FUNDED GRANTS:

1. Yang, K.P., Alkadi, G., McDowell, P., and Tran, Q., "Enhancement of Classroom Technologies for Computer Education," *Southeastern STF Large Project Proposal*, November, 2019, funded \$13,173.76.
2. Yang, K.P. and Alkadi, G., "Upgrading Class Servers for Computer Education," *Southeastern STF Small Project Proposal*, October, 2019, funded \$4,999.94.
3. Yang, K.P., "Real-World Ready Grant Application for Computer Architecture," *Southeastern RWR Grant Application*, April, 2018, funded \$3,000.00.
4. Yang, K.P., "Upgrading Classroom Technologies for Computer Education," *Southeastern STF Small Project Proposal*, October, 2017, funded \$10,000.36.
5. Yang, K.P., "Updating Hardware and Software Packages Related," *Southeastern STF Small Project Proposal*, February, 2016, funded \$5,000.
6. Yang, K.P., van Delden, S., and Alkadi, G., "Taking Southeastern's Robotics Summer Camp to New Heights: UAV Aerial Multicopters," *Southeastern STF Small Project Proposal*, October, 2013, funded \$3,634.
7. Yang, K.P., van Delden, S., and Alkadi, G., "Robotics Summer Camps," *Southeastern STF Small Project Proposal*, March, 2013, funded \$5,000.
8. Alkadi, G. and Yang, K.P., "Software/Hardware: A Lab for Extremes and Everything in Between," *Louisiana Board of Regents (BOR)*, proposal # ENH-00005332-2011, 6/1/12 - 6/1/13, funded \$65,454.
9. Zhang, W. and Yang, K.P., "GIS and OpenMath Server," *Southeastern STF Small Project Proposal*, December, 2010, funded \$4,983.
10. Yang, K.P., "Content Dictionaries for Markup Languages in OpenMath Format," *2009 ONR-ASEE Summer Faculty Fellow at Naval Research Laboratory – NASA Stennis Space Center*, 5/9/2009 – 8/29/2009, funded \$14,000.
11. Yang, K.P., "Content Dictionaries for Markup Languages in OMDoc Format," *Naval Research Laboratory – NASA Stennis Space Center*, 9/15/2008 – 5/15/2009, funded \$24,938.
12. Yang, K.P., "Physics Markup Language (PML)," *2008 ONR-ASEE Summer Faculty Fellow at Naval Research Laboratory – NASA Stennis Space Center*, 5/9/2008 – 8/29/2008, funded \$14,000.
13. Alkadi, G. and Yang, K.P., "Developing an Interdisciplinary Lab for Collaborative Activities in CS/IT," *Louisiana Board of Regents (BOR)*, proposal # 043UG-06 C/IS, 6/1/06 - 6/1/07, funded \$30,140.
14. Trace, D., Evens, M., Sundin, D., Yang, K.P., Kim, J.Y., and Kim, Y.C., "EMIRJ –PATS Project," *MEDCOM Information System, Inc.*, 8/1/04 – 7/31/05, funded \$107,908.

PUBLICATIONS/PRESENTATIONS:

1. McDowell, P., and Yang, K.P., "Memory Based Learning Augmented with Simulated Annealing for a Two Joint Arm," *International Research Journal of Advanced Engineering and Science (IRJAES)*, ISSN 2455-9024, 5(4): 244-247, November, 2020.
2. Yang, K.-P., McDowell, P., Demourelle, R., Parker, T. and Langstonirst, E., "3D Printing: A Custom-Built 3D Printer with Wireless Connectivity," *SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE)*, ISSN 2348 – 8387, 7(10): 1-5, October, 2020.
3. Yang, K.-P., Jee, A., Leblanc, D., Weaver, J. and Armand, Z., "Experimenting with Hotword Detection: The Pao-Pal," *European Journal of Electrical Engineering and Computer Science (EJECE)*, ISSN 2506-9853, 4(5): 1-5, September, 2020.
4. McDowell, P., Terranova, C., and Yang, K.P., "Design of an Automated Pseudo-Code Grading Tool," *International Journal of Engineering Research & Technology (IJERT)*, ISSN 2278-0181, 8(12): 47-50, December, 2019.
5. McDowell, P., and Yang, K.P., "Emergent Behavior based Limb Control using the Repulsive Root Technique," *International Journal of Engineering Research & Technology (IJERT)*, ISSN 2278-0181, 8(11): 264-267, November, 2019.
6. Yang, K.P., Burningham, A., Champagne, K., Dahal, D., and Hernandez, J., "A Venture to Build a CNC Machine," *International Journal of Computer & Organization Trends (IJCOT)*, ISSN 2249-2593, 9(5): 5-9, October, 2019.

7. Yang, K.P., Mcdowell, P., Dolan, P., Otts, C., Chenevert, G., and Tunstall, C., "SelfieBot: A Robot to Detect, Photograph, and Tweet Smiles," *International Journal of Engineering Research & Technology (IJERT)*, ISSN 2278-0181, 8(10): 387-390, October, 2019.
8. Yang, K.P., Kiepper, G., Henry, B., and Hunter, R., "Modular Architecture for IoT Home Automation and Security Surveillance," *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, ISSN 2458-9403, 5(11): 8978-8982, November, 2018.
9. Yang, K.P., Dejean, R., Clapp, C., Banks, R., Raygadas, D., and Bendanas, I., "Network Security Practical Concepts, Importance, and Potential Implications," *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, ISSN 2458-9403, 4(10): 8318-8322, October, 2017.
10. Yang, K.P., Moran, N., Bendana, I., Champagne, S., and Becker, T., "LOPEZ: A Bilingual Robotic Car," *International Journal of Research in Advent Technology (IJRAT)*, E-ISSN 2321-9637, 4(12): 51-55, December, 2016.
11. LeJeune, J., Tunstall, C., Yang, K.P., and Alkadi, I. "An Algorithmic Approach to Improving Cloud Security: The MIST and Malachi Algorithms," *Proceedings of 2016 IEEE Aerospace Conference*, 1-7, Big Sky, Montana, March, 2016.
12. Yang, K.P., Poudel, R., Jha, N., and Chenevert, G., "MapBuddies: Web Application for the Travelling Salesman Problem," *International Journal of Research in Advent Technology (IJRAT)*, E-ISSN 2321-9637, 3(12): 5-9, December, 2015.
13. Yang, K.P., Beaubouef, T., and Chiu, M., "Lesson Learnt from Smart Home Automation Systems," *Journal of Emerging Trends in Computing and Information Sciences*, ISSN 2079-8407, 6(3): 149-153, March, 2015.
14. Alkadi, I., Alkadi, G., Beaubouef, T., and Yang, K.P., "Implementing Cloud Based Storage for Southeastern Louisiana University," *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, 49-60, New Orleans, Louisiana, October, 2014.
15. van Delden, S. and Yang, K.P., "Robotics Summer Camps as a Recruiting Tool: a Case Study," *Journal of Computing Sciences in Colleges*, 29(5): 14-22, May, 2014.
16. Yang, K.P., van Delden, S., and Bond, E., "KinectFlix: A Hand Gesture Recognition Application for Kinect to Watch Netflix," *World Journal of Computer Application and Technology (WJCAT)*, ISSN 2331-4982, 2(1): 6-9, January, 2014.
17. Yang, K.P., Alkadi, G., Gautam, B., Sharma, A., Amatya, D., Charchut, S., and Jones, M., "Park-A-Lot: An Automated Parking Management System," *Journal of Computer Science and Information Technology (CSIT)*, ISSN 2331-6063, 1(4): 276-279, December, 2013.
18. Yang, K.P. and Beaubouef, T., "Content Dictionaries for Relational Algebra," *International Journal of Research in Advent Technology (IJRAT)*, ISSN 2321-9637, 1(4): 164-169, November, 2013.
19. Alkadi, I., Alkadi, G., Yang, K.P., and Gill, M., "Enforcing Anti-Breaching of Security in Cloud Computing by Applying Multiple Methodologies to Enhance Protection of Cloud Based Grids/Servers," *International Journal of Engineering Research & Technology (IJERT)*, ISSN 2278-0181, 2(9): 2602-2612, September, 2013.
20. Yang, K.P., Beaubouef, T., and Morrison, J., "Sleep Walking Prevention (SWP) Alarm System," *Journal of Emerging Trends in Computing and Information Sciences*, ISSN 2079-8407, 4(8): 657-661, August, 2013.
21. Petry, F., Zhang, W., Zambo, S., and Yang, K.P., "Physics Markup System," *Patent: Navy Case Number: Navy# 102167*, December, 2012.
22. Yang, K.P., Zhang, W., and Petry, F., "Physics Markup Approaches Based on Geometric Algebra Representations," *Journal of Informatica*, ISSN 0350-5596, 36(1): 91-102, March, 2012.
23. Zhang, W., Beaubouef, T., and Yang, K.P., "Revamping Computer Science Seminar Course for Comprehensive Assessment of Student Learning," *Journal of Computing Sciences in Colleges*, 27(5): 17-23, May, 2012.
24. Yang, K.P. and Wallace, K., "File Systems in Linux and FreeBSD: A Comparative Study," *Journal of Emerging Trends in Computing and Information Sciences*, ISSN 2079-8407, 2(9): 456-459, September, 2011.
25. Chiu, M., Yang, K.P., Meyer, R., and Kidder, T., "Analysis of a Man-in-the-Middle Experiment with Wireshark," *Proceedings of the 2011 International Conference on Security and Management (SAM'11)*, 461-464, Las Vegas, Nevada, July, 2011.
26. Yang, K.P. and Beaubouef, T., "Radio Frequency Identification (RFID) Projects for Computer Science," *Journal of Computing Sciences in Colleges*, 26(4): 21-27, April, 2011.

27. Beaubouef, T., Zhang, W., Alkadi, G., and Yang, K.P., "Beyond the CS Curriculum: Empowering Students for Success," *Journal of Computing Sciences in Colleges*, 26(4): 78-84, April, 2011.
28. Yang, K.P. and Beaubouef, T., "Equivalence of Hardware and Software: A Case Study for Solving Polynomial Functions," *Proceedings of the 42nd IEEE Southeastern Symposium on System Theory (SSST)*, 318-322, Tyler, TX, March, 2010.
29. Zhang, W., Yang, K.P., Petry, F., Zambo, S., and Shrestha, R., "Using OpenMath to Present Semantics of Geometric Algebra," *Proceedings of the 42nd IEEE Southeastern Symposium on System Theory (SSST)*, 362-366, Tyler, TX, March, 2010.
30. Yang, K.P., Petry, F., and Collins, J., "Building Content Dictionaries for Geometric Algebra in OpenMath Format," *Journal of Computing Sciences in Colleges*, 25(4): 22-29, April, 2010.
31. Yang, K.P. and Beaubouef, T., "Hardware vs. Software Implementations for Calculating Roots of Polynomials," *Journal of Computing Sciences in Colleges*, 25(4): 15-21, April, 2010.
32. Edwards, V., Courtney, M., and Yang, K.P., "A FPGA Paint Brush Application," *Information Systems Education Journal (ISEDJ)*, ISSN: 1545-679X, 7(36): 1-8, April, 2009.
33. Shrestha, R., Watts, M., Zhang, W., and Yang, K.P., "Representing Clifford Algebra into OMDoc Format," *Journal of Computing Sciences in Colleges*, 24(4): 124-129, April, 2009.
34. Halvorson, K., and Yang, K.P., "Using Java Network Protocols to Deliver Medical Education Applications," *Louisiana Academy of Sciences (LAS)*, Hammond, Louisiana, February, 2009.
35. Yang, K.P., Beaubouef, T., and Alkadi, G., "A FPGA Development and Education Board for Computer Science," *Louisiana Academy of Sciences (LAS)*, Hammond, Louisiana, February, 2009.
36. Yang, K.P., Zhang, W., and Petry, F., "Building Content Dictionaries for Geometric Algebra in OMDoc Format," *Proceedings of the 47th ACM Southeast Conference*, Article No. 45, Clemson, South Carolina, March, 2009.
37. Yang, K.P., Evens, M., and Trace, D., "Using a Java Dynamic Tree to Manage the Terminology in a Suite of Medical Applications," *Journal of Methods of Information in Medicine*, 47(6): 499-504, December, 2008.
38. Yang, K.P. and Beaubouef, T., "Automatic Generation of Web Survey for Assessment Purposes in Computer Science," *Journal of ACM Special Interest Group on Computer Science Education (SIGCSE) Bulletin*, 40(4): 78-82, December, 2008.
39. Edwards, V., Courtney, M., and Yang, K.P., "A FPGA Paint Brush Application," *Proceedings of the 25th Information Systems Education Conference (ISECON)*, 1-7, Phoenix, Arizona, November, 2008.
40. Yang, K.P. and Beaubouef, T., "A Field Programmable Gate Array Media Player for RealMedia File," *Journal of Computing Sciences in Colleges*, 23(6): 133-139, June, 2008.
41. Yang, K.P., Evens, M., and Trace, D., "Generating Better Text Summaries for a Patient Simulation Program," *Proceedings of the 46th ACM Southeast Conference*, 57-62, Auburn, Alabama, March, 2008.
42. Yang, K.P. and Alkadi, G., "A Modern Hardware Kit for Computer Science," *Proceedings of the 2007 International Conference on Computer Design (CDES 2007)*, 68-73, Las Vegas, Nevada, June, 2007.
43. Alkadi G. and Yang, K.P., "Software Engineering Projects in Our Department," *Proceedings of the 2007 International Conference on Software Engineering Research & Practice (SERP 2007)*, 525-529, Las Vegas, Nevada, June, 2007.
44. Yang, K.P., Alkadi, G., Asoodeh, M., and Bonnette, J., "Developing a Hardware Laboratory for Computer Science," *Journal of Computing Sciences in Colleges*, 22(5): 92-93, May, 2007.
45. Yang, K.P., Evens, M.W., and Trace, D.A., "Improving the Text Summaries in the Intelligent Medical Record," *Proceedings of the 17th Midwest Artificial Intelligence and Cognitive Science Conference*, 111-116, Valparaiso, Indiana, April, 2006.
46. Sundin, D., Kim, J., Yang, K.P., Kim, Y., Trace, D.A., Tang, Q., and Evens, M.W., "Integrating Speech, Touch Screen, and Keyboard for Medical Order Entry," *Proceedings of the 17th Midwest Artificial Intelligence and Cognitive Science Conference*, 123-129, Valparaiso, Indiana, April, 2006.
47. Yang, K.P., Evens, M.W., and Trace, D.A., "What The Disorder Pattern Toolbox Can Do," *Proceedings of the 44th ACM Southeast Conference*, 772-773, Melbourne, Florida, March, 2006.
48. Sundin, D., Yang, K.P., Kim, J., Kim, Y., Evens, M.W., and Trace, D.A., "Using Speech Recognition Technology for Medical Order Entry," *Proceedings of the 15th Midwest Artificial Intelligence and Cognitive Science Conference*, 124-128, Dayton, Ohio, April, 2005.
49. Yang, K.P., Kim, J., Evens, M.W., and Trace, D.A., "The New Disorder Pattern Toolbox," *Proceedings of the 15th Midwest Artificial Intelligence and Cognitive Science Conference*, 109-115, Dayton, Ohio, April, 2005.

50. Yang, K.P., Evens, M., and Trace, D., "Designing the Interaction between the Student and the Patient Simulation System," *18th International Conference on Advanced Science and Technology*, Chicago, Illinois, 66-73, August, 2002.
51. Yang, K.P., Evens, M., and Trace, D., "Chief Complaint Reports in the Intelligent Medical Record," *13th Midwest Artificial Intelligence and Cognitive Science Conference*, Chicago, Illinois, 151-156, April, 2002.
52. Yang, K.P., Evens, M., and Trace, D., "Building an Up-to-Date Medical Record System," *17th International Conference on Advanced Science and Technology*, Chicago, Illinois, 52-56, October, 2001.
53. Yang, K.P., Evens, M., and Trace, D., "Terminology Matching for Interactive Simulated Patients," *12th Midwest Artificial Intelligence and Cognitive Science Conference*, Oxford, Ohio, 141-148, March, 2001.
54. Yang, K.P., Evens, M., Trace, D., and Chern, J., "Patient Simulation for Medical Education" *16th International Conference on Advanced Science and Technology*, Batavia, Illinois, 141-148, June, 2000.

SERVICE:

- Faculty Senate: Budget Committee (2008 – 2014), Website Administrator (2012 – 2014)
- University Tenure and Promotion Committee (2018 – Present)
- Tenure & Promotion Committee (2009 – Present)
- Assessment Committee (2003 – Present)
- Curriculum Committee (2003 – Present)
- Department Head Search Committee (2005, 2006, 2012, 2018, 2019)
- Computer Science Faculty Search Committee (2006, 2008, 2012, 2014, 2016, 2017, 2018)
- Consortium for Computing Sciences in Colleges: SC (CCSC:SC) Steering Committee (2008 – 2010)
- Louisiana Academy of Sciences (LAS) Meeting Planning Committee (2008-2009)
- Region 8 Science Fair: Coordinator of Computer Science (2004 – 2015)
- Southeastern Louisiana University Gamers: Advisor (2007 – 2010)
- Southeastern Association for Computing Machinery (ACM): Advisor (2010 – Present)
- Upsilon Pi Epsilon Computer Science Honor Society: Co-advisor (2004 – 2012)
- Computer Science Lab: Lab worker coordinator (2004)
- Computer Science's Tutor Center: Director (2018 – Present)
- CMPS 161 (CS1): Coordinator (2018 – Present)