

KYONGIL YOON

INTERESTS

- Online Mathematics Education
- Learning Management System
- Mathematics/Geometry in Art
- Computer Vision (Human Recognition and Tracking in Video Surveillance)
- Video Processing and Content Analysis
- Augmented Reality
- Mobile Technology

EXPERIENCE

- Aug. 2006–Present Notre Dame of Maryland University, Baltimore, MD
Associate Professor at Computer Studies Department
- 2010–Present Nemustech Co., Korea
Technical Consultant
- Aug. 2014–Dec. 2014 Nemustech Co., Korea
*Visiting Researcher with the support by Brain Pool Scouting program of NIPA
Developed StarTrek (Meta Information Extract System from Video)*
- 2009–Present Cafalab Inc., MD
Co-Founder
- Aug. 2005–Jun. 2006 McDaniel College, Westminster, MD
Visiting Assistant Professor at Computer Science Department
- Jan. 2001–Aug. 2005 University of Maryland, College Park, MD
Research Assistant at Computer Vision Lab.
- Jun. 1998–Jan. 2001 University of Maryland, College Park, MD
Research Assistant at Language and Media Processing Lab., CfAR.
- Sep. 1996–May. 1998 University of Maryland, College Park, MD
Teaching Assistant at Computer Science Department.
- Mar. 1992–Jun. 1996 Samsung Electronics, Co., Ltd., Kiheung, Korea
Senior Research in Multimedia Group
- Feb. 1990–Feb. 1992 Samsung Advanced Institute of Technology, Kiheung, Korea
Research in Multimedia Group

EDUCATION

- 1997–2005 University of Maryland at College Park College Park, MD
Ph.D. in Computer Science
Thesis title: *Key-frame Appearance Analysis for Video Surveillance*
- 1988–1990 Seoul National University Seoul, Korea
M.S. in Computer Science
- 1984–1988 Seoul National University Seoul, Korea
B.S. in Computer Science and Statistics

TEACHING & COMPUTER SKILLS

- Courses taught
 - Programming Languages and Concepts
 - C++ (Basic, Advanced)
 - Visual Basic
 - Pytho
 - Java
 - Fundamentals of Information System
 - Web Page Design (HTML, CSS, JavaScript)
 - Web Animation (Adobe Flash, HTML5 Canvas and JavaScript)
 - Data Structures/Algorithms
 - Database Concepts
 - Data Tools
 - Data Visualization
 - Statistics
 - Telecommunication and Networking
 - Software Engineering
- Operating Systems and Computer Languages
 - C, C++, Java, Python, R, ASP, JavaScript, Visual Basic, Php
 - Unix, Linux, Windows, Amazon AWS
 - DBMS: MySQL, SqlServer, MS Access

INTRODUCTION TO MICROCOMPUTER APPLICATIONS (MS OFFICE) PUBLICATIONS

- Choi, J., Kim, S., & Yoon, K. (2017). CAFA AIG Manual: Computer Adaptive Formative Assessment Automatic Item Generation User's Guide [System Manual], 2nd edition. Clarksville, MD: CAFA Lab, Inc.
- Choi, J., Kim, S., & Yoon, K. (2017). K-Math Workbook Grade 7. Clarksville, MD: CAFA Lab, Inc., ISBN/EAN13: 0998129801 / 9780998129808
- Choi, J., Kim, S., & Yoon, K. (2016). K-Math Workbook Grade 6. Clarksville, MD: CAFA Lab, Inc., ISBN/EAS13: 0998129860 / 9780998129860
- Geometric Constructions of Korean Danchong Patterns And Building Platonic Solids Kyongil Yoon, Hyunkyung Kim and Reza Sarhangi, *Bridges Conference, Seoul, Korea, 2014*
- CAFA (Computer Adaptive Formative Assessment™) Client Application: Automatic Item Generation™ (v 1.0 Beta) [Computer System], Choi, J., Kim, S., & Yoon, K. eMathTest, Inc. 2014
- CAFA (Computer Adaptive Formative Assessment) Smart Workbook (v 1.0 Beta) System: CAFA Client Application for Common Core Math Workbook [Computer System], Choi, J., Kim, S., & Yoon, K., eMathTest, Inc., 2014
- CAFA (Computer Adaptive Formative Assessment) Smart Assignment (v 1.0 Beta) System: CAFA Client Application for School Assignments [Computer System], Choi, J., Kim, S., & Yoon, K., eMathTest, Inc., 2014

- CAFA (v 1.0 Beta) System: Computer Adaptive Formative Assessment System for Educational Services [Computer System], Choi, J., Kim, S., & Yoon, K., eMathTest, Inc., 2012
- Analytical Calculation of Geodesic Lengths and Angle Measures on Sphere Tiling of Platonic and Archimedean Solids, Kyongil Yoon, *Bridges Conference, Towson, USA, 2012*
- ezIA (v 1.0.0): A Microsoft Excel Add-In for test item analysis
Choi, J., Kim, S., & Yoon, K., 2009 [Computer software].
- Background Subtraction Enhancement using Segmentation
Kyongil Yoon, *Ninth ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing, 2008, Phuket, Thailand*
- Appearance-based Human Gallery Construction from Video
Kyongil Yoon, Yaser Yacoob, David Harwood, *International Conference on Signal Processing and Multimedia Applications, Jul. 28-31, 2007, Barcelona, Spain*
- Human Appearance Modeling for Matching across Video Sequences
Yang Yu, Kyongil Yoon, David Harwood, Larry Davis, *Machine Vision and Applications, 2007*
- Appearance-based Person Recognition using Color/Path-Length Profile
Kyongil Yoon, David Harwood, Larry Davis
A special issue on the topic of Real-Time Imaging in 'Journal of Visual Communication and Image Representation' 2006
- Key-frame Appearance Analysis for Video Surveillance
Kyongil Yoon
Ph.D Thesis, University of Maryland, 2005
- Event Detection from MPEG Video in the Compressed Domain
Kyongil Yoon, Daniel DeMenthon, David Doermann
International Conference on Pattern Recognition (ICPR'00), Sep. 03-08, 2000, Barcelona, Spain