# JAMES J. LEE

ALBERS SCHOOL OF BUSINESS & ECONOMICS
SEATTLE UNIVERSITY
JAMESLEESEATTLE@GMAIL.COM

#### RESEARCH INTERESTS

- Machine Learning Design Pattern in Microservices
- Cloud Native Development and Management
- Mobile/Web Apps Development in Business

#### TEACHING INTERESTS

- Data Analytics Big Data, Web Analytics
- Business Applications/Programming Python
- Online Teaching

#### **EXPERIENCE**

## **Genevieve Albers Visiting Fellow**

Seattle University, Seattle, Washington

September 2008 - Present

Full time faculty for teaching, research, and service to Albers College of Business and Economics. Create a fully online class for IS core course and will develop another one for a MSBA course. Teach information systems courses, using the big data analytics platform such as Hadoop, Spark, Ubuntu, Docker, and GIT with Python, CSS, HTML, JavaScript, PHP, Database, and CMS. Conduct research on information technologies on the data analytics using microservices architecture using containers. Provide services in the areas of IT infrastructure of The University, IS student club, and industries in Seattle area.

#### **Director of Development**

July 2013 - November 2015

Clocktower Media Inc., Kirkland, Washington

Develop and maintain new web frameworks for consulting and delivering business web sites development projects. Research and review the trends of web technologies and provide business insights to create/maintain commercial web sites.

## **IT Director**

September 2007 – 2012

Korea Prostate Bank, Seoul, South Korea

A lead designer and developer for the Prostate Database and web site including collection of patient information and building human sample data bank in laboratories. Collaborated with University of Pennsylvania Medical School to exchange Prostate Data Bank information.

#### **Director of IT**

March 2012 - August 2012

JMTek Technologies, Seattle, Washington

Design and develop multiple e-commerce web sites with shopping carts. Develop the guidelines of information-driven product and sales management.

## **Assistant Professor, Information Systems**

August 2001 - June 2008

State University of New York at Binghamton, Binghamton, New York

Teach undergraduate and graduate courses in Business College. Publish research articles on topics in ERP software, Virtual Organization, and E-Business. Worked on IT conceptualization that underlines IT logic to Business Values.

## **Research Assistant, Software Engineer**

August 1993 - June 2001

University of Nebraska-Lincoln, Lincoln, Nebraska

Develop and maintain Management Science Application Software. This includes debugging and upgrading the current software from the old DOS-based application to Windows-based application.

Instructor

August 1998 - June 2001

University of Nebraska-Lincoln, Lincoln, Nebraska

Teach classes including business programming and introduction to MIS with full responsibilities including designing, teaching, grading and consulting the courses.

#### **EDUCATION**

## Information Systems, Doctor of Philosophy

August 1995 – August 2001

University of Nebraska-Lincoln, Lincoln, Nebraska

Dissertation Title: Integration and Internalization in ERP Adoption and Use.

Study focused in knowledge transfer from logics of ERP system to business process reengineering in ERP implementation. Research Assistant for developing and debugging software (operations management). Instructor for teaching numerous IS and programming courses.

## Information Systems, Master of Science

August 1992 - May 1995

University of Nebraska-Lincoln, Lincoln, Nebraska

Studies focused in management information systems in various areas, such as DBMS, systems analysis and design, and IT management, with computer science emphasis on advanced programming, data structure, and software algorithm. Created working prototypes for numerous IS projects and DBMS.

## Biology, Bachelor of Science

March 1986 – February 1990

SungKyunKwan University, Seoul, South Korea

Studied general Biology including taxonomy, molecular biology, and biochemistry. Training in biological theories and practices helped critical thinking, which eventually built competitive foundations of software algorithm and information systems logics. Vice President of Biology Student Association.

#### **FULLY PUBLISHED ARTICLES**

Qianhui Guo and James Lee. (2020) Exploring the Determinants of Higher Education Degree Productivity in Machine Learning, Issues in Information Systems, Volume 21, Issue 4, pp. 123-134.

James Lee and Misuk Lee. (2020) Artificial Social Intelligence: Hotel Rate Prediction, Advances in Information and Communication in Advances in Intelligent Systems and Computing, Vol. 1130.

James Lee, Ben Kim, and Tim Mushen. (2018) Parallel Polylithic Architecture: Microservices, Issues in Information Systems, Vol. 19, No. 4, pp. 65-68.

James Lee and Jessica Imanaka. (2018) Theorizing Virtuality in Enterprise Social Systems, *Entrepreneurship, Collaboration, and Innovation in the Modern Business Era*, edited by Mehdi Khosrow-Pour, Hershey, PA: Idea Group Reference.

James Lee and Jessica Imanaka. (2016) Managing Virtuality in Enterprise Social Systems, International Journal of E-Business Research, Vol. 12, No. 1, pp. 1-18.

James J. Lee, Ben B. Kim, and Peter Raven. (2014) Cloud Computing: Enterprise 2.0, Issues in Information Systems, Vol. 15, No. 2, pp. 110-246.

Pairin Katerattanakul, James Lee, and Dr. Soongoo Hong. (2014) Effect of Business Characteristics and ERP Implementation on Business Outcomes: An Exploratory Study of Korean Manufacturing Firms, Management Research Review, Vol. 37, Iss. 2, pp. 186-206.

James J. Lee, Bandula Jayatilaka, Ben B. Kim, Pairin Katerattanakul. (2012) The Semiotic Structures of Information Systems, Issues in Information Systems, Vol. 13, No. 2, pp. 285-295.

James J. Lee, Ben B. Kim, Ted E. Lee, Pairin Katerattanakul, and Wan Yui See. (2010) Web Communications Structure, Issues in Information Systems, Vol. 11, No. 1, pp. 237-246.

James Lee, Bandula Jayatilaka, Ben Kim, Ted Lee, Pairin Katerattanakul, and Soongoo Hong. (2010) From Virtual Organization to E-Business: Transformational Structuration, International Journal of E-Business Research, Vol. 6, No. 4, pp. 13-25.

James Lee, Yong-Jin Kim, Surinder Kahai and Ben Kim. (2009) Toward Intelligent Business Integration: The Semantic Web, Issues in Information Systems, Vol. 10, No. 2, pp. 400-406.

Pairin Katerattanakul, Hwee-Joo Kam, and James Lee. (2009) Migrating Legacy Systems in the Global Merger & Acquisition Environment Teaching Case, Journal of Information Systems Education.

Bandula Jayatilaka, Heinz Klein, and Jinyoul Lee. (2007) On Categorizing the IS Research literature - User Oriented Perspective, Informing Science Journal, Vol. 10, pp. 237-271.

Sang M. Lee, Zoonky Lee and Jinyoul Lee. (2007) Knowledge Transfer in Work Practice: Adoption and Use of Integrated Information Systems. Industrial Management & Data Systems, Vol. 107, No. 4, pp. 501-518.

Jinyoul Lee, Mike Eom, Bonn-oh Kim and Pairin Katerattanakul. (2007) Virtual Organization: Resource-Based View, International Journal of E-Business Research, Vol. 3, No. 1, pp. 1-17.

Pairin Katerattanakul, Soongoo Hong, and Jinyoul Lee. (2006) Enterprise Resource Planning Survey of Korean Manufacturing Firms, Management Research News, Vol. 29, No. 12, pp. 820-837.

Jinyoul Lee. (2005) Virtual Organization in the Human Mind, in Encyclopedia of Information Science and Technology, edited by Mehdi Khosrow-Pour, Hershey, PA: Idea Group Reference

Jinyoul Lee, Mike (Tae-In) Eom and Bonn-Oh Kim. (2005) Strategic Use of Virtual Organization, in e-Collaborations and Virtual Organizations, edited by Michelle Fong, Hershey, PA: IRM Press.

Jinyoul Lee, Soongoo Hong, and Keng Siau. (2003) Enterprise Integration with ERP and EAI, The Communications of ACM, Vol. 46, No. 2, pp 54-60.

Bonn-Oh Kim, Ted Lee, Yong Sok Choi and Jinyoul Lee. (2003) Web Services and Their Business Implications, Issues in Information Systems, Vol. 4, pp. 521-529.

Jinyoul Lee and Bandula Jayatilaka. (2003) Virtual Organization: Duality of Human Identities, in Consciousness and Entity, Managi Government, Business & Communities, edited by Gerry Gingrich, Hershey, PA: IRM Press.

Zoonky Lee and Jinyoul Lee. (2003) An ERP Implementation Case Study from a Knowledge Transfer Perspective, in Second Wave Enterprise Resource Planning Systems: Implementation and Effectiveness, Edited by Graeme Shanks, Peter Seddon and Leslie Willcocks, Cambridge, UK: Cambridge University Press.

Zoonky Lee and Jinyoul Lee. (2000) An ERP Implementation Case Study from a Knowledge Transfer Perspective, The Journal of Information Technology, Vol. 15, No. 4, pp. 281-288.

#### **CONFERENCE PROCEEDINGS**

James Lee, Hisaki Goto, Akiyuki Ando, Ted Lee. (2012) Cloud Computing: Web 2.0 and Enterprise 2.0, Proceedings of Asia Pacific Conference on Information Management.

James Lee, Ben B. Kim, Ted E. Lee, Danny Teng, and James J. Lee. (2011) Enterprise 2 meets Cloud Computing, Proceedings of Pan-Pacific Conference.

Ben B. Kim, Ted E. Lee, Sungyoul Lee, and James J. Lee. (2010) Identifying E-Business Components of Global Organizations and Determinants, Proceedings of Pan-Pacific Conference.

Pairin Katerattanakul, James J. Lee, Soongoo Hong, and Hwee-Joo Kam. (2009) Effect of Business Characteristics and ERP Implementation Strategies on ERP Outcomes: An Exploratory Study, Proceedings of Americas Conference on Information Systems (AMCIS).

James J. Lee, Bandula Jayatilaka, Ben B. Kim, Ted E. Lee, Pairin Katerattanakul, Soongoo Hong. (2008) Structuration of E-Business: Virtual Organizational Transformation, Proceedings of National Decision Sciences Institute Conference (DSI).

Pairin Katerattanakul, Hwee-Joo Kam, James Lee, Soongoo Hong. (2008) Migrating Legacy Systems in the Global Merger & Acquisition Environment Teaching Case, Proceedings of Americas Conference on Information Systems (AMCIS).

Jinyoul Lee, Surinder Kahai, Yong J. Kim, Bonn-oh Kim, and Pairin Katerattanakul. (2007) Web Science: The Conceptualization of Semantic Web, Information Resources Management Association International Conference (IRMA). Accepted and forthcoming.

Yong J. Kim, Jinyoul Lee, and Pairin Katerattanakul. (2007) The Effect of the Combination of Business Characteristic with ERP Implementation Strategies on Firm Performance, Information Resources Management Association International Conference (IRMA).

Pairin Katerattanakul, Michael Torian, and Jinyoul Lee. (2006) Migrating Legacy Systems in the Global Merger & Acquisition Environment, Proceedings of National Decision Sciences Institute Conference (DSI).

Jinyoul Lee and Jordan Shapiro. (2004) The Virtual Organization Matrix: Studying Virtual Organizations through Classification, Proceedings of Information Resources Management Association International Conference (IRMA).

Jinyoul Lee, Mike Eom, and Bonn-Oh Kim. (2003) Strategic Use of Virtual Organizations, Proceedings of Information Resources Management Association International Conference (IRMA).

Bandula Jayatilaka and Jinyoul Lee. (2003) An Epistemological Taxonomy for Knowledge Management Systems Analysis, Proceedings of Hawaiian International Conference on Systems Science (HICSS).

Jinyoul Lee, Bandula Jayatilaka, and Ron Kwok. (2002) Virtual Organizations: Duality of Human Identities in Consciousness and Entity, Proceedings of Information Resources Management Association International Conference (IRMA).

Choongkwon Lee and Jinyoul Lee. (2001) An Empirical Analysis: Information Technology Investment In Small Banks, Proceedings of Americas Conference on Information Systems (AMCIS).

Soongoo Hong, Jinyoul Lee, and Pairin Katerattanakul. (2001) Key Factors to Success of Web Warehousing Implementation, Proceedings of National Decision Sciences Institute Conference (DSI).

Jinyoul Lee and Soongoo Hong. (2001) The Trend and Future Direction of Enterprise Integration: ERP and EAI, Proceedings of SAM International Management Conference.

Choongkwon Lee and Jinyoul Lee. (2000) Users, IS Department, And Investors: Three Stakeholders In Measuring IS/IT Projects, Proceedings of National Decision Sciences Institute Conference (DSI).

Zoonky Lee and Jinyoul Lee. (2000) ERP-based Knowledge Transfer, Proceedings of Information Resources Management Association International Conference (IRMA)

#### **PRESENTATIONS**

Misuk Lee and James Lee. (2020) Neural Network Blending Structures For Forecasting, INFORMS Annual Meeting, Virtual Conference due to COVID-19.

Qianhui Guo and James J. Lee. (2020) Exploring the Determinants of Higher Education Degree Productivity in Machine Learning, International Association for Computer Information Systems Conference, Virtual Conference due to COVID-19.

James Lee and Misuk Lee. (2020) Artificial Social Intelligence: Hotel Rate Prediction, Future of Information and Communications Conference, San Francisco, California.

James Lee and Misuk Lee. (2019) Machine Learning Blending Approach To Improving Forecasting Accuracy, INFORMS Annual Conference, Seattle, Washington.

James Lee, Ben Kim, and Tim Mushen. (2018) Parallel Polylithic Architecture: Microservices, International Association for Computer Information Systems Conference, Clearwater Beach, Florida.

James Lee. (2013) Data Analytics in Prostate Cancer Patients, APPS Consensus Guideline Meeting: 1st K-cap, J-cap & CaPSURE Joint Meeting: 7th J-cap & CaSURE Joint Meeting. Incheon, South Korea.

Jinyoul Lee, Surinder Kahai, Yong J. Kim, Bonn-oh Kim, and Pairin Katerattanakul. (2007) Web Science: The Conceptualization of Semantic Web, Information Resources Management Association International Conference (IRMA).

Yong J. Kim, Jinyoul Lee, and Pairin Katerattanakul. (2007) The Effect of the Combination of Business Characteristic with ERP Implementation Strategies on Firm Performance, Information Resources Management Association International Conference (IRMA).

Jinyoul Lee and Jordan Shapiro. (2004) The Virtual Organization Matrix: Studying Virtual Organizations through Classification, Proceedings of Information Resources Management Association International Conference (IRMA).

Jinyoul Lee, Mike Eom, and Bonn-Oh Kim. (2003) Strategic Use of Virtual Organizations, Proceedings of Information Resources Management Association International Conference (IRMA).

Jinyoul Lee, Bandula Jayatilaka, and Ron Kwok. (2002) Virtual Organizations: Duality of Human Identities in Consciousness and Entity, Proceedings of Information Resources Management Association International Conference (IRMA).

Choongkwon Lee and Jinyoul Lee. (2000) Users, IS Department, And Investors: Three Stakeholders In Measuring IS/IT Projects, Proceedings of National Decision Sciences Institute Conference (DSI).

#### RESEARCH IN PROGRESS

- Machine Learning Modeling in Containerization
- Data Visualization Automation in Microservices Architecture
- Automation and configuration in managing containerized workloads and services

#### **TEACHING EXPERIENCE**

- Online Courses Taught:
  - Fully Online: Introductory Information Systems (appointed as an example of effective online course to the Central American University Managua)
  - Hybrid: Management of Information Technology
- Doctoral Courses Taught:
  - MIS Seminar, Team Teaching
- Graduate Courses Taught:
  - Big Data Analytics
  - Web Analytics
  - Strategies and Technologies on the Internet
  - IT Management
  - Information Systems Development Project
  - Business Programming
- Undergraduate Courses Taught:
  - E-Business and Web Design
  - Web Application & Development
  - Internet Marketing
  - Object-Oriented Modeling in Business
  - Information Systems Development Project
  - Development & Integration in VB
  - Introduction to IS
  - Business Application

#### **ACTIVITIES & AWARDS**

Editorial Advisory Board Member:

- International Journal of E-Business Research
- Business Process Management Journal
- International Journal of Handheld Computing Research

#### Ad hoc Reviewer of journals and conferences:

Communications of ACM, Journal of AIS, Information Resources Management Journal, International Journal of Internet and Enterprise Management, International Journal of Information Technology and Decision Making, and various conferences (ICIS, AMCIS, HICSS, IRMA, etc.)

#### Faculty Advisor:

Information Systems Student Club in Seattle University Korean Student Union in Seattle University

#### **Doctoral Dissertation Committee:**

An external committee member for Arthur A. LaPlante of Capella University

Session Chair, Microservices, IOT, and Cloud Computing Session of 2018 International Association for Computer Information Systems, Clearwater Beach, Florida

Track Chair, Semantic Web Track of 2007 Information Resources Management Association International Conference, Vancouver, Canada

Winner in Service Field, Productivity Improvement Competition, University of Nebraska-Lincoln 1997

**Graduate Assistant Nominee 1998** 

#### **Publications In**

Communications of ACM
Industrial Management & Data Systems
International Journal of E-Business Research
Informing Science Journal
Issues in Information Systems
Journal of Information Technology
Journal of Information Systems Education
Management Research News

### **Courses Taught**

Big Data Analytics
IT Management
Internet Marketing
Introduction to IS
E-Business Management
Web Analytics
Web Technologies and Strategies
Web Apps Development
Business Applications and Programming
Object-Oriented Programming
MIS Seminar

#### **Development Skills**

AJAX
ASP.NET
C#
ColdFusion
CSS3
HTML5
JavaScript

jQuery

Pascal

PHP

Python Ruby Shell Scripting SQL Scripting Visual Basic

## **Development Platform**

Big Data Analytics
Content Management Systems
CSS Frameworks
Containerization -Docker
JavaScript Libraries and Plugins
MySQL
Open Source Web Architecture
PHP Frameworks
Microframework (Ruby Sinatra)
Server (Linux, Windows)
Tableau
Web Analytics
Web Server