Curriculum Vitae

Fanyu Frank Zeng

Assistant Professor of Computer Information Technology and Data Analytics
DeVoe School of Business, Technology, and Leadership
Indiana Wesleyan University
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Marion, IN 46953

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ACADEMIC ACHIEVEMENT

Master of Science	Ohio University	Mathematics with Computer Science option, Degree Awarded, 1992
Master of Engineering	Southeast University	Major in Computer Science and Engineering, Degree Awarded, 1988
Bachelor of Engineering	Southeast University	Major in Computer Science and Engineering, Degree Awarded, 1985

PROFESSIONAL AFFILIATION

American Society of Engineering Education (ASEE), Professional Member
Council for Christian Colleges & Universities, Member

PROFESSIONAL WORKING EXPERIENCE

- **Education**

    08/03 - Present – Indiana Wesleyan University, Marion, Indiana, Assistant Professor in Computer Information Technology and Data Analytics

    Develop a new Master's degree in Data Analytics program. I was in charge of developing three new DTAN courses.

    Develop a new Associate's degree in Computer Information Technology program. I was responsible for developing new CIT courses, coordinating new distributed computer laboratories, and conducting faculty searches and evaluations.

    Teaching courses for Associate's, bachelor's, and master's degree programs (Business and Management, Business Information Systems, and Computer Information Technology):

    - Computer Information Processing – both onsite and online
    - Visual BASIC .NET Programming – both onsite and online
    - Java Programming – both onsite and online

- Managerial Relational Database Systems – both onsite and online
- Data Communication and Networks – both onsite and online
- Web Application Development
- Network Communication and Troubleshooting
- Desktop Applications (Microsoft Office, Word, Excel, Access, PowerPoint, Outlook, Publisher, Visio and Internet Explorer)
- Hardware and Software Troubleshooting
- Economic Analysis
- Applied Microeconomics for Business
- Applied Macroeconomics for Business
- Personal Finance
- Business Mathematics
- Business Statistics (Bachelor Program)
- Business Statistics (MBA Program)
- Analysis of Data and Research (Statistics for Criminal Justice Program) – both onsite and online
- Business System Analysis and Design (Bachelor's Degree Senior Capstone Course and Seminar)
- Associate's Degree Program Capstone
- Data Visualization
- Data Mining
- Data Sources/System Analytics
- Information Systems Security
- Cyberlaw, Regulations and Compliance

- **Professional Practice**

  09/03 – Present – Independent Consulting

  System design: planning, technical specification, coding, test plan, testing, change management, implementation, maintenance, and support for various computer systems; client contact/meeting; project initialization; project planning, project coordination, project development, implementation, and customer technical support.

  05/03 – 08/03 – Chase Bank (formerly Banc One Corp.), Columbus, Ohio, Application Development Analyst II

  User requirement analysis, application system analysis, design, test, document, implement, and support the Retail, Trust, and FirstUSA Credit Card Process Systems(including collection) for Bank One. 7/24 on-call customer technical support.

  11/02 – 05/03 - Information Control Corporation/Nationwide Insurance, Columbus, Ohio, Consultant

  System design; planning, technical specification; coding; test plan; testing and supporting the Retail Statement system for Nationwide Insurance (Retirement Plans, Pension, Annuity, and other financial products); client contact/meeting, project initialization; project planning; project coordination and lead; customer technical support.

11/00 – 10/02 - OARnet, Columbus, Ohio, Senior Systems Administrator

Project management; new technology evaluation; database management and administration; software (HP OPENVIEW and Remedy) evaluation, installation, and maintenance; software development – Database Admin, Web Statistics Analysis Report Project; systems backup analysis, design, and management (both Solaris/Unix and PC NT); 7/24 on-call support.

6/98- 11/00 - Bank One Corp., Columbus, Ohio, Senior System Analyst

User requirement analysis, design, code, test, implement, and support the Bank One Statements System (BOSS) for Bank One Retail Group; disaster recovery; track monthly project status and prepare Team Monthly Project Status Report and System Accident (Abend) Statistical Reports; attended the monthly meeting to report to Bank One Retail Banking Group Senior Management; 7/24 customer technical support.

10/96 - 6/98 – The Ohio State University, Columbus, Ohio, Systems Manager

User requirement analysis; new project initialization and development; existing project improvement; regularly meeting with clients/users to determine business needs; consult with clients to evaluate existing software and help users get their requirements; translate user requirements to technical specifications; develop, maintain and manage the OSU Billing and Account Receivable System (BARS); develop, test and maintain the Student Loan Processing and Collection System; maintain system backup management. 7/24 Customer technical support.

12/94 - 10/96 - Banc One Financial Card Services Corp.(Triumph), Columbus, Ohio, Senior System Analyst/Programmer

Met with clients/users to help them determine business needs; wrote tools for credit card processing system performance and tuning for Bank One Financial Card Processing System (Triumph). Consult with clients to evaluate existing software and helped users get their requirements to be written; translated user requirements to technical specifications. Communicate with users regularly; follow up on any change or update of user requirements from users; provide business and technical advice to the user; design, develop, test, and implement the Credit Card Authorization System (Triumph) for BANAMEX; Bank One Credit Card Service Center Customer Service/Collection project initialization, design, code, and implementation. 7/24 on-call customer technical support.

06/93 - 12/94 - Analysts International Inc, Columbus, Ohio, Consultant

Regularly met with clients/users to determine business needs; consulted with clients to evaluate existing software and helped users gather their requirements; translated user business requirements to technical specifications; designed, developed, tested, and implemented the Financial and Customer Service Systems for a utility company; design, develop, test, implement and maintain a Customer Financial Credit Application Processing System for a credit bureau.

01/92 - 06/93 – The Limited Too Inc, Columbus, Ohio, Programmer Analyst

Design, develop, test, implement, and maintain the Merchandise, Finance, and Store Systems. 7/24 on call customer technical support.

06/90 - 08/91 – Ohio University, Athens, Ohio, Teaching Associate

Teaching Computer Literacy (Excel)
Teaching Database (ORACLE and SQL)

CREATIVE ENDEAVOR AND SCHOLOARSHIP PUBLICATIONS

- F. Zeng, (June 2004) "*A New Approach to Integrate Computer Technology Certifications into Computer Information System Programs*", *", Proceedings and Presentation,* 2004 American Society of Engineering Education (ASEE) Annual Conference, Salt Lake City, Utah.

- F. Zeng, (February 2005) "*Studies on Student's Motivations in Business Statistics Courses* ",*Presentation ",* 2005 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (June 2005) "*An Approach to Addressing the Needs for Microsoft Office Specialist Training in Technology Programs*", *Proceedings and Presentation,* 2005 American Society of Engineering Education (ASEE) Annual Conference, Portland, Oregon.

- Three paper reviews for 2005 American Society of Engineering Education (ASEE) Annual Conference, Portland, Oregon

- F. Zeng, (February 2006) "*Applying Biblical Principles with Business Principles into ASCIT Technology Courses", Presentation,* 2006 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (July 2006) "*A New Model to Utilize Microsoft Project for Project Management in Business Information System Program*", *Presentation,* 2006 Independent Colleges of Indiana (ICI) Annual Conference, Marion, Indiana.

- F. Zeng, (February 2007) "*A Study of New Laboratory Exercises in Online Computer Information Technology Courses" Presentation,* 2007 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (June 2007) "*Exploring New Online Laboratory Modules for the Online Computer Networking Course*", *Proceedings and Presentation,* 2007 American Society of Engineering Education (ASEE) Annual Conference, Honolulu, Hawaii.

- Three paper reviews for 2007 American Society of Engineering Education (ASEE) Annual Conference, Honolulu, Hawaii.

- F. Zeng, (June 2007) "*Soft Skills in Technology Program*", *Proceedings and Presentation,* 2nd No Educator Left Conference, Indianapolis, Indiana.

- F. Zeng, (June 2007) "*Special Technical Issues in Online Teaching*", *Proceedings and Presentation,* 2007 American Society of Engineering Education (ASEE) Annual Conference, Honolulu, Hawaii.

- F. Zeng, (February 2008) "*Methods of Utilizing Statistics Software to Optimize Student Learning" Presentation,* 2008 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

F. Zeng, (June 2008) "*A Collaborative Curriculum Enhancement with Recognition of Characteristics of Chinese College Students", Proceedings and Presentation,* 2008 American Society of Engineering Education (ASEE) Annual Conference, Pittsburg, Pensyvallia.

- F. Zeng, (March 2009) "*Statistics Software Helps Student's Critical Thinking and Problem Solving?" Presentation,* 2009 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (June 2009) "*A Collaborative Curriculum Development to Improve Chinese Student Learning Outcomes*", *Proceedings and Presentation,* 2009 American Society of Engineering Education (ASEE) Annual Conference, Austin, Texas.

- F. Zeng, (March 2010) "*Studies on Information Systems Specialty Programs" Presentation,* 2010 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (June 2010) "*Integrating Communication as a New Learning Component into Chinese Software Engineering Program*", *Proceedings and Presentation,* 2010 American Society of Engineering Education (ASEE) Annual Conference, Louisville, Kentucky.

- F. Zeng, (March 2011) "*Improve Student Learning Results in Computer Programming Courses" Presentation,* 2011 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (June 2011) "The Studies of Effective Teaching and Learning Methods in Chinese Engineering Education "*, Proceedings and Presentation,* 2011 American Society of Engineering Education (ASEE) Annual Conference, Vancouver, BC, Canada.

- F. Zeng, (March 2012) "Will Technology Really Improve Student's Learning Outcomes in Business Statistics Courses?*,* 2012 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (June 2012) "*Building a Comprehensive Solution to Obtain and Sustain Student Learning Outcomes for a Collaborated Lab*", *Proceedings and Presentation,* 2012 American Society of Engineering Education (ASEE) Annual Conference, San Antonio, Texas.

- F. Zeng, (March 2013) "*Studies on Future of Online Education and Impacts on Existing Online Education" Presentation,* 2013 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (March 2013) "*A New Concept of Lab Course Design - Student's Active Participations in Design and Assessment*", *Proceedings and Presentation,* 2013 International Conference on Education and Teaching (ICET), Wuhan, China.

- F. Zeng, (August 2013) "*A multi-objective PSO algorithm based Niche Technique for service-workflows scheduling*", *Proceedings and Presentation,* 2013 2nd International Conference on Mechanical Properties of Materials and Information Technology (ICMPMIT2013), Hong Kong.

- F. Zeng, (December 2013) "*Data Analysis for a New Concept of Lab Course Design - Student's Active Participations*", *Proceedings and Presentation,* 2013 International Conference on Advanced Education Technology and Management Science (AETMS2013), Hong Kong.

- F. Zeng, (March 2014) "*Effectively Engage Students in Their Learning - Essay Writing and Evaluation by Both Instructor and Students*" *Presentation,* 2014 Midwest Scholar Conference (MSC), Indianapolis, Indiana.

- F. Zeng, (November 2014) "*Unique Characteristics of Generation Y Adult Learners*", *Proceedings and Presentation, 2014 International Conference on Education and Social Development(ICESD2014).* Wuhan, China.

- F. Zeng, (November 2018) "*Using Existing Curriculum to Introduce New Technologies*" *Presentation,* 2018 IWU Faculty Scholarship Symposium. Marion, Indiana.

- Y. Xu, J. Sun, F. Zeng, (March 2019) "*Research on Factors of City Transportation Accident and Forecasting Modeling",2019 International Conference on Physics, Mathematical Modeling and Simulation (ICPMMS2019).* Beijing, China.

- Y. Xu, L. Liu, X. Gao, F. Zeng, (October 2019) "*Analysis of Factors in Flight Delay",* 2019 2nd International Conference on Mathematics, Modeling and Simulation Technologies and Applications, Xiamen, China
.
- F. Zeng, (October 2020) "*Hybrid Learning Course Design Study: Technology Tools for Instructors",* 2020 IWU Faculty Scholarship Symposium, Marion, Indiana, USA

- Book review for "*Java for Everyone*" published by Wiley & sons, March 2012.

- Book review for "*Corporate Computer Security*" published by Pearson, February 2013.

- Test Bank Revision for Raymond Panko's Textbook *"Business Data Networks & Security 9e"* published by Pearson, February 2014.

- Accuracy Check for Raymond Panko's Textbook *"Business Data Networks & Security 10e"* published by Pearson, November 2014.

- F. Zeng, (June 2021), "*Research on Integration of Critical Skills Development into Database, Statistics, and Computer Programming Courses for the Success of Future Data Analysts",* 2021 Christian Scholars' Conference, Nashville, TN,

- X. Zhang, F. Zeng, (June 2024) "*An improved time series temperature prediction algorithm based on Kalman Filter and LSTM*", *Proceedings and Presentation,* 2024 International Conference on Energy and Electrical Engineering, Nanchang, Jiangxi.

- F. Zeng, (June 2024) "*Challenges and Innovative Strategies in International Student Education*", *Proceedings and Presentation,* 2024 American Society of Engineering Education (ASEE) Annual Conference, Portland, Oregon.

TEACHING

Significant contributions to curriculum are noted below:

ADM 316: Computers and Information Processing	- 3 credits (5 weeks)
BIS215: Introduction to Business Information Systems	- 3 credits (5 weeks)
BIS216: Information Systems & Project Management	- 4 credits (6 weeks)
BIS222: Business Software Tools	- 3 credits (5 weeks)
BIS320: Managerial Relational Database Systems	- 3 credits (5 weeks)
BIS324: Networking, Systems, & Security	- 4 credits (8 weeks)
BIS340: Business Programming I	- 3 credits (5 weeks)
BIS341: Business Programming II	- 3 credits (5 weeks)
BIS342: Business Programming III	- 3 credits (5 weeks)
BIS343: Business Programming IV	- 3 credits (5 weeks)
BIS344: Visual Basic .NET Programming	- 4 credits (8 weeks)
BIS346: Java Programming	- 4 credits (8 weeks)
CIT112: Introduction to Computer Information Systems	- 3 credits (5 weeks)
CIT120: Introduction to Programming Concepts	- 3 credits (5 weeks)
CIT140: Operating Systems Concepts	- 3 credits (5 weeks)
CIT220: Desktop Applications	- 3 credits (5 weeks)
CIT260: Network Communications	- 3 credits (5 weeks)
CIT262: Database Concepts	- 3 credits (5 weeks)
CIT270: E-Commerce & Web Development	- 3 credits (5 weeks)
CIT272: Hardware & Software Troubleshooting	- 3 credits (5 weeks)
CIT280: Project Management and Integration	- 3 credits (5 weeks)
MAT1xx: Business Research and Data Analysis	- 3 credits (6 weeks)
CRJ467: Research Methods and Analysis in Criminal Justice	- 3 credits (5 weeks)
CIT124: Visual Basic .NET Programming	- 3 credits (6 weeks)

Courses Taught

BIS215: Introduction to Business Information Systems	- 3 credits (5 weeks)
BIS216: Information Systems & Project Management	- 3 credits (5 weeks)
ADM316: Computers and Information Processing	- 3 credits (5 weeks)
ADM320: Business Statistics	- 4 credits (6 weeks)
ADM515: Applied Business Statistics	- 4 credits (8 weeks)
BIS225: Software Tools	- 3 credits (5 weeks)
BIS320: Managerial Relational Database Systems	- 3 credits (5 weeks)
BIS324: Networking, Systems, & Security	- 4 credits (8 weeks)
BIS344: Visual Basic .NET Programming	- 4 credits (6 weeks)
BIS324: Networking, Systems, & Security	- 4 credits (8 weeks)
BIS340: Business Programming I	- 3 credits (5 weeks)
BIS341: Business Programming II	- 3 credits (5 weeks)
BIS342: Business Programming III	- 3 credits (5 weeks)
BIS343: Business Programming IV	- 3 credits (5 weeks)
BIS346: VB .NET Programming	- 4 credits (8 weeks)
BIS346: Java Programming	- 4 credits (8 weeks)
BIS350: Web Application Development	- 3 credits (5 weeks)
BIS460: Business Systems Analysis & Design	- 4 credits (8 weeks)

BUS150: Personal Finance	- 3 credits (5 weeks)
BUS230: Global Issues	- 3 credits (5 weeks)
CIT120: Introduction to Programming Concepts	- 3 credits (5 weeks)
CIT220: Desktop Applications	- 3 credits (5 weeks)
CIT260: Network Communications	- 3 credits (5 weeks)
CIT272: Hardware & Software Troubleshooting	- 3 credits (5 weeks)
CIT280: Business Systems Analysis & Design	- 3 credits (5 weeks)
ECO205: Basic Economics	- 3 credits (5 weeks)
ECO330: Applied Microeconomics for Business	- 3 credits (5 weeks)
ECO331: Applied Macroeconomics for Business	- 3 credits (5 weeks)
MAT100: Analysis of Data and Research	- 4 credits (6 weeks)
MAT110: Business Mathematics	- 3 credits (5 weeks)
MAT109: Pre-Algebra	- 3 credits (5 weeks)
MAT116: College Algebra	- 3 credits (6 weeks)
CIT124: VB .NET Programming	- 3 credits (6 weeks)
CIT126: Java Programming	- 3 credits (6 weeks)
DTAN505: Data Visualization	- 3 credits (6 weeks)
DTAN510: Data Sources/System Analytics	- 3 credits (6 weeks)
DTAN515: Big Data	- 3 credits (6 weeks)
DTAN525: Data Mining	- 3 credits (6 weeks)
CITM502: Information Systems Security	- 3 credits (6 weeks)
CITM503: Cyberlaw, Regulations, and Compliance	- 3 credits (6 weeks)

SERVICE
  1. University Service

- Student Affair Committee
- Technology Committee
- Curriculum Development Committee
- General Education Committee
- Faculty Meeting
- New Facilitator Search and Mentoring
- Peer Observations
- IWU Student Fair Committee member (2005-2007)
- International Faculty Trainer.
- ASCIT Program Manager
- ASCIT Program Lab Equipment Management
- Student Career Coach
- New Technology Evaluation
- Technology Course Evaluation
- Curriculum Committee
- Hind Scholarship Committee

  2. Community Service
- Volunteer at Local Chinese and Asian Community and Organization since 2003.
- Volunteer at Local Chinese Bible Study Group and Church since 2003.
- Volunteer at Southwest Allen County School since 2003.

PROFESSIONAL DEVELOPMENT

- 2004 American Society of Engineering Education (ASEE) Annual Conference Exposition, Salt Lake City, UT. June 2004
- 2005 American Society of Engineering Education (ASEE) Annual Conference Exposition, Portland, OR. June 2005
- 2005 Midwest Scholar Conference (MSC), Indianapolis, Indiana. February 2005
- 2006 American Society of Engineering Education (ASEE) Annual Conference Exposition, Chicago, IL. June 2006
- 2006 Midwest Scholar Conference (MSC), Indianapolis, Indiana. February 2006
- 2006 Thomson/Cashman IT Course Writer Conference, Bloomington, IN. July 2006
- 2006 Independent Colleges of Indiana (ICI) Annual Conference, Marion, Indiana. July 2006
- 2007 Midwest Scholar Conference (MSC), Indianapolis, Indiana. February 2007
- 2nd No Educator Left Annual Conference Exposition, Indianapolis, IN. June 2007
- 2007 American Society of Engineering Education (ASEE) Annual Conference Exposition, Honolulu, HI. June 2007
- 2008 Midwest Scholar Conference (MSC), Indianapolis, Indiana. February 2008
- 2008 American Society of Engineering Education (ASEE) Annual Conference Exposition, Pittsburg, PA. June 2008
- 2009 Midwest Scholar Conference (MSC), Indianapolis, Indiana. March 2009
- 2009 American Society of Engineering Education (ASEE) Annual Conference Exposition, Austin, TX. June 2009
- 2010 Midwest Scholar Conference (MSC), Indianapolis, Indiana. March 2010
- 2010 American Society of Engineering Education (ASEE) Annual Conference Exposition, Louisville, KY. June 2010
- 2011 Midwest Scholar Conference (MSC), Indianapolis, Indiana. March 2011
- 2011 American Society of Engineering Education (ASEE) Annual Conference Exposition, Vancouver, BC, Canada. June 2011
- 2012 Midwest Scholar Conference (MSC), Indianapolis, Indiana. March 2012
- 2012 American Society of Engineering Education (ASEE) Annual Conference Exposition, San Antonio, TX. June 2011
- 2013 Midwest Scholar Conference (MSC), Indianapolis, Indiana. March 2013
- 2013 International Conference on Education and Teaching (ICET), Wuhan, China. March 2013
- 2013 International Conference on Advanced Education Technology and Management Science (AETMS2013), Hong Kong. December 2013
- 2014 Midwest Scholar Conference (MSC), Indianapolis, Indiana. March 2014
- 2014 International Conference on Education and Social Development(ICESD2014). Wuhan, China. November 2014
- 2018 IWU Faculty Scholarship Symposium,, Marion, Indiana, November 2018
- 2019 International Conference on Physics, Mathematical Modeling and Simulation (ICPMMS2019). Beijing, China. March 2019
- 2024 American Society of Engineering Education (ASEE) Annual Conference Exposition, Portland, OR. June 2024
- Lilly Scholarship 2009
- 2021 Christian Scholars' Conference, Nashville, TN, June 2021
- IWU Research Mini-Grant 2024

Faculty Development
- Online Faith Integration
- Midwest Scholars Conference/Presenter
- Project Teams w/Mike Manning

- Brown Bag w/John Wrightsman
- "What is Caught is More Important Than What is Taught" with Cynthia Tweedell
- Online "Four I's"
- Midwest Scholars Conference
- Project Teams w/Dan Poff
- Peer Observation and Training
- International Culture Difference in Classroom