

Cynthia C Forgie

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Education:

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| 2005-2008 | University of Louisville, Speed Scientific School
Doctor of Philosophy in Industrial Engineering |
| 1999-2003 | Kansas State University, Department of Computing, and Information Sciences
Master of Software Engineering |
| 1984-1996 | University of Louisville, Speed Scientific School
Master of Engineering Management |
| 1978-1984 | University of Louisville, Speed Scientific School Bachelor
of Science in Industrial Engineering |

Work Experience:

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| 2023 – Present | Assistant Professor of Practice: University of Louisville, College of Business
<i>Teach undergraduate courses in Operations Management.</i> |
| 2010 – 2023 | Supervisory Operations Research Specialist Analyst:
Maneuver Center of Excellence Maneuver Battle Lab, Fort Moore, GA <i>Planned, organized, directed, and sequenced work assignments for a staff of 13 military, civilian and contractor personnel assigned to the Maneuver Capabilities Development and Integration Directorate, Maneuver Battle Lab, Analysis Branch. Supervised analytical activities and synchronized support for live field and constructive simulation experimentation designed to support scientific research and technology development. Projects were diverse and included new or modified operational concepts, training devices, weapons systems and other hardware or organizational systems. Results informed the Army modernization enterprise and provided guidance for procurement of combat and Soldier systems.</i> |
| 2018-2023 | Adjunct Professor:
DePaul University, Driehaus College of Business, Chicago, IL
<i>Developed and taught undergraduate and graduate level courses in operations management. Primary responsibilities included preparing teaching materials; conferring with students on course materials; directing course projects; and evaluating assigned coursework. All courses were delivered via an asynchronous online platform, requiring additional technical proficiency and administrative skills.</i> |

- 2008-2010 Assistant Professor - Industrial Engineering: University of Southern Indiana, Evansville, IN
Responsibilities included teaching, student advising, research, service and cooperative extension, and administrative duties.
- 2005-2008 Guest Lecturer: University of Louisville
Taught Operations Research I: Deterministic Models for the University of Louisville Speed Scientific School Panama Program during the 2005 Summer semester. Taught MNGT 401, Operations Management for the University of Louisville College of Business during the 2007 Fall and 2008 Spring semesters.
- 1999-2005 Instructor and Academic Advisor: Kansas State University, Department of Computing and Information Sciences, Manhattan KS
Responsible for all activities required to administer assigned Computing and Information Sciences courses. Also advised and assisted undergraduate students with all matters relevant to their college career. Including course scheduling, scholarship applications, career fields, financial aid, and graduate school opportunities.
- 1995-1999 Deputy Director, Test and Evaluation Coordination Office: Fort Knox, KY
Supervised a team of ten civilian and military personnel and was the resident expert on all test and evaluation matters. Designed, developed, and published documents prescribing test conditions and specifications to which systems and crews must be subjected to determine operational effectiveness, survivability, and suitability. Conducted test activities and managed test personnel to ensure compliance with test procedures and integrity of data collection. Utilized applicable statistical and mathematical techniques to analyze test results and document findings.
- 1991-1995 Industrial Engineer: Naval Ordnance Station Louisville
Technical authority on all matters pertaining to Industrial Engineering functions. Responsible for analyzing organizational procedures and advising management on the economy and efficiency of operations; system layout and design for optimum man-machine interface; developing techniques for measuring operational efficiency; ensuring maximum utilization of resources; and providing guidance and recommendations on production operations.
- 1986-1991 Mathematician/Statistician: Armor and Engineer Test Board, Fort Knox, KY
Worked independently and as a team member performing operations research, systems analysis investigations and general suitability studies for the Army.
- 1984-1986 Industrial Engineer: TRADOC Management Engineering Activity, Fort Knox, KY
Worked independently and as a team member conducting Efficiency Reviews and Manpower Staffing Standards Studies for the Army.

**Awards &
Honors:**

Department of the Army Superior Civilian Service Award (09/2023). Recognized for meritorious performance from 2010-2023 as Chief, Experimentation Analysis Branch, Maneuver Battle Lab, Fort Moore GA. The second highest Department of the Army Honorary Award for Army Employees.

DePaul University Driehaus College of Business (06/2021): Received the Daniel Honors Seiden Distinguished Teaching Award.

American Society of Engineering Education (06/2010): Received the New Industrial Engineering Educator Outstanding Paper Award.

Louis D. Brandeis Scholarship Award (04/2008): Awarded by the Louisville Chapter of the Institute of Industrial Engineers (IIE) to the industrial engineering student who has demonstrated both scholarly achievement and the promise of corresponding professional attainment.

Kentucky Space Grant Consortium Graduate Fellowship to perform collaborative research with the NASA Ames Research Center (2007-2008)

University of Louisville President's Fellowship (2005-2007)

Order of St. Joan D Arc (2001): Recognized for significant voluntary contributions to the Army community.

Award - Dr. Mary E. Walker (2000): Recognized for community service.

**Publications,
Papers, and
Presentations:**

Cynthia Forgie, Thomas Yanoschik, Cynthia Dunn, Stephen Miller, and Major Sean Fraser (November 2023). *Accreditation of Simulation-Based Experiments: Beyond the M&S*, I/ITSEC 2023, Orlando, FL.

Cynthia Forgie. (September 2021). *Army Expeditionary Warrior Experiment 2021*. Presented at the 2021 Army Operations Research Symposium, Virtual Event.

Cynthia Forgie. (October 2020). *Unmanned Aerial Resupply at the Tactical Edge*. Presented at the 2020 Army Operations Research Symposium, Virtual Event.

Cynthia Forgie. (October 2018). *Maneuver Battle Lab (MBL) Analysis Surveying Tool (MAST)*. Presented at the 2018 Army Operations Research Symposium, Aberdeen Proving Grounds, MD.

Cynthia Forgie. (October 2017). *Current Trends in Small Unit Modernization*. Presented at the 2017 Army Operations Research Symposium, Aberdeen Proving Grounds, MD.

Cynthia Forgie. (October 2016). *Army Expeditionary Warrior Experiment 2016*. Presented at the 2016 Army Operations Research Symposium, Aberdeen Proving Grounds, MD.

Cynthia Forgie. (October 2015). *Utilizing the Load Effects Assessment Program – Army (LEAP-A) to Support Army Experimentation*. Presented at the 2015 Army Operations Research Symposium, Aberdeen Proving Grounds, MD.

Cynthia Forgie. (November 2014). *A Campaign of Experimentation to Inform the Operational Concept for the Future Squad*. Presented at the 2014 Army Operations Research Symposium, Aberdeen Proving Grounds, MD.

Cynthia Forgie. (November 2014). *Army Expeditionary Warrior Experiments (AEWE)*. Presented at the 2014 Army Operations Research Symposium, Aberdeen Proving Grounds, MD.

Cynthia Forgie. (November 2012). *Squad: Foundation of the Decisive Force Measures of Effectiveness*. Presented at the 2012 Army Operations Research Symposium, Ft Lee, VA.

Cynthia Forgie. (November 2011). *Validating the Capacity Requirement for the Ground Combat Vehicle (GCV) Infantry Fighting Vehicle (IFV)*. Presented at the 50th Army Operations Research Symposium, Ft Lee, VA.

Cynthia Forgie. (November 2011). *Evolution of Soldier Protective Equipment - A Campaign of Demonstrations*. Presented at the 50th Army Operations Research Symposium, Ft Lee, VA.

Cynthia Forgie. (October 2010). *Long Range Sniper Rifle*. Presented at the 49th Army Operations Research Symposium, Ft Lee, VA.

Cynthia Forgie, Marco Lara Gracia and MT Morris. (June 2010). *A Service-Learning Case Study: An Efficiency Study of a Metropolitan Bus Transit System*. Proceedings of the 2010 ASEE Annual Conference, Louisville KY.

Cynthia Forgie and Gerald Evans. (June 2010). *Assessing Technology Maturity as an Indicator of Systems Development Risk*. *Systems Engineering: Tools and Methods for Engineers*. New York, NY: Auerbach Publications.

Cynthia Forgie and Marco Lara Gracia. (September 2009). *Metropolitan Evansville Transit System Efficiency Study*. Prepared for Mayor Jonathan Weinzapfel, Mayor of Evansville and William Brodwater, Director of METS. Presented at the Office of the Mayor, Evansville IN, April 14, 2008.

Cynthia Forgie and Gerald Evans. (May 2008). *Planning and Risk Assessment for Long Range Technology Programs*. Proceedings of the Industrial Engineering Research Conference, Vancouver, Canada.

Cynthia Forgie and Gerald Evans. (August 2007). *Modeling Technology Development Risk for Space Exploration Systems*. Proceedings of the INFORMS Midwest Regional Conference, Chicago IL.

First Year Engineering at USI. Poster presentation at the Reforming the First Year Engineering Experience Workshop, Norte Dame, IN, 2-4 August 2009.

Technology Forecasting Methodologies, presented at the CORS/INFORMS International Conference, Toronto, Canada, June 14-17, 2009.

Modeling Technology Development Risk for Space Exploration Systems. Poster presentation for the Kentucky Experimental Program to Stimulate Competitive Research Statewide Conference, Louisville, KY, Oct 3, 2008.

Planning and Risk Assessment for Long Range Technology Programs.

Guest speaker at the NASA Ames Research Center, San Jose, CA, March 2007.