

## Darryl K. Ahner, Ph.D., P.E.

### Curriculum Vitae SUMMARY OF EXPERIENCE

- Over 23 years of higher education experience with demonstrated impactful and visionary leadership in academic innovation, enrollment growth, student success and fiscal accountability.
- Currently, Dean and Professor of the College of Engineering and Computer Science at Wright State University with nearly 2,400 students and an annual budget of 16.75 million dollars.
- Previously, Dean for Research at the Air Force Institute of Technology overseeing the research program's funding growth from \$23.5M (FY20) to \$35.9M (FY22) and all external public communication.
- Founding Director of the Office of the Secretary of Defense Scientific Test and Analysis Techniques (STAT) in Test and Evaluation Center of Excellence leading to the award of the Office of the Secretary of Defense Medal for Exceptional Civilian Service for education and workforce development, the Office of the Secretary of Defense's highest level career medaled award.
- A leader committed to learner development and outcomes as demonstrated by implementation of student success best practices and improved retention.
- Significant strategic planning and plan implementation experience in both founding of new organizations and reenergizing established organizations.
- Proven research leadership as a research center director developing relationships and developing and executing over \$42 million dollars in institutional grants.
- Proven excellence at the rank of full professor in research, teaching and service with successfully advising multiple graduate students to completion, executing over \$2.5 million in research grants, and producing 38 refereed journal publications, 32 conference proceedings, and 4 book chapters.
- Proven strategic planner and implementor having led internal and external teams in assessment, goal identification, metric development, implementation, and updates at the center, department, college, and institution levels.

#### EDUCATION

Boston University, Ph.D., Systems Engineering

Rensselaer Polytechnic Institute, M.S., Operations Research and Statistics

Rensselaer Polytechnic Institute, M.S., Applied Mathematics

United States Military Academy (West Point), B.S., Mechanical Engineering (Aerospace)

## Professional Experience

WRIGHT STATE UNIVERSITY, Dayton, OH

### **Dean and Professor, College of Engineering and Computer Science, Wright State University (July 2023 – Present)**

The Dean of the College of Engineering and Computer Science at Wright State University serves as the chief academic and administrative officer for the college, providing visionary leadership and fostering a collaborative and inclusive environment to advance its mission. The Dean's primary responsibilities include strategic leadership, academic and program development, faculty and staff leadership, research and innovation, resource management, enrollment management, diversity and inclusion, community and industry engagement, student success and engagement, and University collaboration and advocacy.

### **Accomplishments**

- Improved first year retention from 66% to 70% through emphasis of the week-long Academic Advantage Program that ensures proper math placement prior to the academic year and assigning best instructors to early engineering core courses.
- Implemented new engineering technology program providing a path to student success for those students who struggle excessively with math courses and those community college graduates wishing to continue for a four-year degree.
- Oversaw and encouraging implementation of a series of reflective course design activities aimed at addressing high DFW to include EGR 1010 allowing students to replace up to 5 unexcused absences with attendance at the help room and reworking midterm exams for points, ME 1040 aligning course material with a third-party certification exam, ME 1020 adjust pacing and project size while maintaining learning objectives, CS 1150 introducing attendance requirements and phased demonstration of lab assignments to prevent procrastination, CS 1180's implemented segmented reading and early assignment feedback, EE 4000's online offering with enhanced peer interaction improved student performance with a class average of B, and EE 3210 undergoing a redesign following best practices for online engagement.
- Implemented a Work Forward Internships Program. Currently, there are 14 corporate participants in the program initially with plans to grow this number substantially.
- Implemented a new requirement to include a digital model into all senior capstone projects to better prepare students for the workforce.
- Obtained a \$900k Advanced Air Mobility grant for the college supporting 13 graduate students.
- Implemented a Digital Engineering and Technology Speaker Series.
- Developed a \$4.5 million Digital Transformation Initiative with Advancement.
- Initiated and empowered a college bylaws committee to ensure consistency across department bylaws resulting in more equitable workload assignments and annual appraisals.
- Increased year over year enrollment by 10.5%.
- Developed Dean's Items of Interest to better capture faculty and student accomplishments for celebration as a community.
- Successfully accomplished ABET reaccreditation of multiple programs.

AIR FORCE INSTITUTE OF TECHNOLOGY, Dayton, OH

### **Dean for Research and Professor (January 2021 to June 2023)**

The Dean for Research leads the Office of Research and Outreach, with duties to include providing advice and assistance to the chancellor, provost, deans, department heads, center directors, and faculty on all matters relating to research, technology transfer, strategic communications, outreach, and partnership activities; facilitating research funding and sponsorship; advocating initiatives designed to improve the research environment, capabilities, and facilities of the Graduate School of Engineering and Management and AFIT; encouraging and facilitating the formation of collaborative research groups among the faculty, technicians, and students; encouraging faculty contacts and participation in joint research with other universities, research organizations, and industry; overseeing the operation of the Office of Research and Technology Applications (ORTA) and serving as the primary point of contact for strategic partnerships.

### **Accomplishments**

As the AFIT Dean for Research, I achieved the following quantitative and qualitative results:

- oversaw the research program's funding growth from \$23.5M (FY20) to \$35.9M (FY 22) and funding expenditures from \$22M (FY 20) to \$33M (FY22); Higher expenditures than received are indicative of a robust growing research program,
- reorganized the Office of Research within the Graduate School to the Office of Research and Outreach to significantly increase the office's scope and impact,
- organized separate technical exchanges between faculty members and 1) Sandia National Lab, 2) Draper Laboratory, and 3) the AFRL Information Directorate,
- organized and executed the first-ever Air Force Office of Scientific Research-AFIT summit resulting in a robust basic research technical exchange,
- led the development, evaluations, and implementation for the new graduate school contract,
- led the Faculty Research Council new faculty and initiatives proposal selection,
- actively interviewed and provided feedback to the hiring committees for all new faculty and department head hires,
- led the Summer Faculty Fellowship Program (SFFP) selection of external professors and select students,
- organized exchange between Army Chief of Cyber and several AFIT entities (computer and electrical engineering department, School of Strategic Studies, and Air Force Cyber Technical Center of Excellence) to explore re-establishing agreements that cover establishing Army faculty and students within the cyber programs.
- coordinated the funding of AFIT as a multi-university hypersonics research lead by coordinating funding directly from OSD R&E.

### **Founding Director, Office of the Secretary of Defense Scientific Test and Analysis Techniques (STAT) in Test and Evaluation Center of Excellence (2011 to 2021)**

The Director, Office of the Secretary of Defense Scientific Test and Analysis Techniques (STAT) in Test and Evaluation Center of Excellence is responsible for planning, implementing, and leading the consultations, education, and training with Department of Defense Major Acquisition Programs. The position is responsible for all aspects of operation of the Center, serves as a spokesman for the Deputy Assistant Secretary of Defense for Developmental Test and Evaluation (DASD(DT&E)) when requested to do so, and is a

member of the Air Force Institute of Technology Graduate School of Engineering and Management faculty. The Director oversees the direct support to acquisition program managers in their efforts for more rigorous testing and evaluation, provides technical assistance to the DASD(DT&E) as requested, oversees the capture and publishing of STAT best practices as well as the development of case studies that exemplify appropriate use of STAT in achieving more rigorous testing and evaluation, is responsible for identification of STAT research needs, and communicates research needs to the academic community.

## **Accomplishments**

In late 2011, the Secretary of Defense's staff approached me and requested that I establish a new center of excellence to increase the scientific rigor of testing new defense systems and assist in the technical development of the defense acquisition workforce. Leading to this event, the Center for Operational Analysis became nationally recognized as a leader in test & evaluation education and research through its workforce development courses and statistics research applications to improve test and evaluation in acquisition.

As the Director of the newly established Scientific Test and Analysis Techniques Center of Excellence, accomplishments include the following:

- developed the center's initial strategic plan, concept of operations, mission and vision,
- identified the knowledge, skill, and ability requirements for personnel,
- hired initial staffing of 6 PhD adjunct faculty members each with at least 5 years of acquisition experience that grew to a technical staff of 45
- provided the visionary leadership to grow from 20 supported programs to 65 supported programs, with the Joint Strike Fighter, Aegis Weapon System, Global Positioning System satellite family of systems, Ground-Based Strategic Deterrent, and Space Based Infrared System, and 2 Department of Energy programs among them, with overall worth in excess of \$1.137 trillion,
- supervised the administrative staff,
- continued development and execution of center strategic planning,
- managed an annual budget of \$18 million,
- during this time as a faculty member, effectively developed test design and reliability courses that were continually delivered and mentored students including advising 21 Masters students with 4 of these students receiving 'best thesis' awards within the graduate school; successfully advising 6 PhD students,
- served on the 2019 Secretary of the Air Force strategic planning committee for reimagining AFIT providing insight into the mapping of programs to industry demands,
- presented as an external invited speaker or conference proceeding on average 4 times per year,
- Awarded the Office of the Secretary of Defense Medal for Exceptional Civilian Service, the Office of the Secretary of Defense's highest level career medaled award.
- In 2022, received the International Test & Evaluation Association Matthew's lifetime achievement award.

## **Director and Professor, Air Force Institute of Technology Center for Operational Analysis (2010 to 2015)**

The Director, Air Force Institute of Technology Center for Operational Analysis is responsible for planning, implementing, and leading strong, progressive research, teaching, consulting, and extension programs. The position is responsible for all aspects of operation of the Center and serves as a spokesman for outreach to the Air Force analytical and logistic communities. The Director oversees the enhancement of the visibility, relevance and excellence of the research portfolio. Additional duties include:

- managed and supervised the administrative staff (3),
- managed and supervised the 14 research assistants and research associates,
- developed and implemented the strategic plan for the Center in coordination with and support of AFIT's strategic plan,
- informed and reported to Air Force and Department of Defense Executives on the Distinguished Review Board,
- maintained and grew a research portfolio that actively engaged with executives throughout the Department of the Air Force and Department of Defense on their education and research needs,
- attracted and built relationships with faculty researchers,
- oversaw curriculum development, scheduling, and delivery of distance learning graduate certificate programs in applied statistics and supply chain management,
- oversaw design of experiments and reliability courses at satellite locations,
- developed and executed contracts,
- provided oversight and execution of financial operations and the annual budget.

### **Accomplishments**

As the AFIT graduate school's Director, Center for Operational Analysis I achieved the following quantitative and qualitative results:

- developed and executed the strategic plan to grow the research portfolio, increase research partnering with major universities, increase faculty participation, and increase projection of quality education to support identified workforce knowledge gaps,
- focused on improved business processes within the Center while growing and managing an active research portfolio,
- forged effective partnerships with faculty members increasing faculty member participation from 22 to 41 graduate faculty members,
- forged effective partnerships with external organizations and demonstrated entrepreneurial acumen by garnering an average of \$4.7 million in research funds annually,
- instituted business rules through new policies and procedures to improve operations that were in compliance with the schools policies,
- led and supervised the distance learning graduate certificate programs in applied statistics and supply chain management, delivered to over 75 graduate students annually,
- oversaw the development and delivery of design of experiments and reliability statistics workforce development courses at satellite locations to over 700 students annually, a new initiative under my leadership,
- increased the number of universities partnering with the Center's research from 3 to 9,
- developed a \$50 million stand-alone services contract coordinated through AFIT leadership, contracting and legal offices.

UNITED STATES MILITARY ACADEMY, West Point, NY

**Director and Associate Professor, Army Research Laboratory Mathematical Sciences  
Center of Excellence at the United States Military Academy (USMA), West Point (2008  
to 2010)**

The Director, Army Research Laboratory (ARL) Mathematical Sciences Center of Excellence is responsible for planning, implementing, facilitating and coordinating research between USMA faculty and the Army Research Laboratory; planning, organizing, and executing of the ARL / USMA Technical Symposium; and recruiting and hiring faculty into the Davies Fellow Program.

The Director oversees the enhancement of the visibility, relevance and excellence of the research portfolio.

**Accomplishments**

As the Director, Army Research Laboratory Mathematical Sciences Center of Excellence I achieved the following quantitative and qualitative results:

- facilitated and coordinated research between USMA faculty and the Army Research Laboratory with an annual research budget of \$280,000 (all faculty on full-time paid position),
- led the planning, organizing, and successful execution of the 17th ARL / USMA Technical Symposium in Atlantic City, NJ with over 60 presentations by students, faculty, and ARL scientists and an attendance of over 500 scientists and engineers,
- founded and oversaw a Visiting ARL Scientist Lecture Series to add relevance to the students' mathematical learning experience,
- hired 7 post-doctoral faculty members emphasizing the institutions diversity objectives,
- led the post-doctoral research mentorship program through teaming with senior faculty members.

Concurrently, in my capacity as a faculty member, I

- served as course director for the senior capstone course with 12-15 advisors each spring semester,
- mentored two A-/B+ students with their senior capstone project resulting in them being recognized for excellence as the best operations research / systems analysis thesis,
- served as course director for nonlinear and linear optimization courses, developing new curricula,
- actively supported the faculty development workshop with teaching presentations and as a senior mentor.

## Select Awards and Honors

- Wright State University Latino Center Querido Amigo Faculty Award (2024)
- International Test & Evaluation Association Allen R. Matthew's lifetime achievement award (2022)
- The Office of the Secretary of Defense Medal for Exceptional Civilian Service (Highest civilian award received for education and workforce development) (2022)
- International Conference on Applied Statistics and Data Analytics Best Paper (2022)
- Affiliate Society Council of Dayton Outstanding Engineers & Scientists Awardee (2017)
- E. Grosvenor Plowman Award for Best Paper at Council of Supply Chain Management Professionals Global Conference (2014)
- Charles Stark Draper Laboratory Fellow (2002)

## External Board Membership

- 2025 - present Board Member, Dayton Regional STEM School
- 2023 - present Executive Board Member, Air Camp Air Masters Competition
- 2021 Technical Committee Member, The National Academies of Sciences, Engineering, and Medicine, Assessing the Physical and Technical Suitability of DoD Test and Evaluation Ranges and Infrastructure
- 2018-2019 Committee Member, Air Force Institute of Technology Restructuring Strategic Planning Study (directed by Secretary of the Air Force and appointed by University President)
- 2013-2016 Board of Directors, Military Operations Research Society

## Professional Organization Membership and Service

- National Council of University Research Administrators, 2022-2023
- American Society for Engineering Education, 2020 - present
- International Test and Evaluation Association, 2012 - present
- Institute for Industrial and Systems Engineering, 2011 - present
- Institute for Operations Research and the Management Sciences, 2001 – present
- Military Operations Research Society, 1997 - present
- Pi Mu Epsilon National Mathematical Honor Society

## Professional Service

- Peer Reviewer, Higher Learning Commission, 2022-2023
- Technical Committee Member, The National Academies of Sciences, Engineering, and Medicine, Assessing the Physical and Technical Suitability of DoD Test and Evaluation Ranges and Infrastructure, 2021
- Editorial Board Member, Military Operations Research Society Journal, 2019- present
- Chair, Education and Professional Development Colloquium, Military Operations Research Society, April, 2015
- Co-chair, Education and Professional Development Colloquium, Military Operations Research Society, March, 2011
- Fundamentals of Engineering (FE) exam writer and reviewer, National Council of Examiners for Engineering and Surveying, Clemson, SC (2008-2014).

## University Service

- Co-chair, Artificial Intelligence Committee, Wright State University, 2023- present
- Primary Advisor, eSports club, 2023- present
- Strategic Planning Committee lead for research, outreach, and strategic communications, 2022-2023
- Committee Member, Air Force Institute of Technology Restructuring Strategic Planning Study (appointed by University President), 2018-2019
- Naval Postgraduate School JIEDDO faculty proposal review board determining the allocation of \$2.8 million, 2007-2008

## Professional Certifications

- Professional Engineer License, Commonwealth of Virginia, License # 0402 035105
- Public Sector Data Governance Professional (PSDGP) - Certified Chief Data Officer
- Certified Test & Evaluation Professional (ITEA)

## Select Publications (\* denotes advised student)

1. \*Hossain, Al Amin, and Darryl Ahner, "Game-Theoretic AI for Zero Trust Cyber Defense," in Proc. IEEE Int. Conf. on Smart Internet of Things (SMARTIoT), Sydney, Australia, 2025.
2. \*Hossain, Al Amin, and Darryl Ahner, "Game Theory-Driven AI for Zero Trust Security," 2<sup>nd</sup> International Conference on Artificial Intelligence, Metaverse, and Cybersecurity, Dubai, United Arab Emirates, 2025. (Best Paper)
3. \*Kumar Pk, Mithun and Darryl Ahner, "Quantitative Analysis of Layer-Wise Bias Weight Sensitivity Across Activation Functions in Deep Neural Networks," 5th International Conference on Robotics, Automation, and Artificial Intelligence, 2025.
4. \*Hossain, Al Amin, Darryl Ahner, Michael Larkin, and Natatha Banerjee, "Strategic AI: Securing Cyberspace through Game-Theoretic Intelligence," in Proc. IEEE National Aerospace and Electronics Conf. (NAECON), Dayton, OH, USA, 2025.
5. \*Choo, Nathaniel, Darryl Ahner, and Bryan Little, "A Survey of Orbit Design and Selection Methodologies," The Journal of the Astronautical Sciences 71.1 (2024): 4.
6. \*Choo, Nathaniel M., Brian Lunday, Darryl K. Ahner, et al., "Investigating Regional Communication Network Robustness of an Asymmetric String-of-Pearls Satellite Constellation Design Framework," Journal of Spacecraft and Rockets (2024): 1-10.
7. \*Leiby, Benjamin, and Darryl Ahner, "A hierarchical cluster approach toward understanding the regional variable in country conflict modeling," Journal of Defense Analytics and Logistics 7.1 (2023): 48-68.
8. \*Choo, Nathaniel, Darryl Ahner, and Lance Champagne, "The effects of aircraft use and available repair spares on aircraft sortie generation: a long-duration logistical wargaming simulation tool," The Journal of Defense Modeling and Simulation 20.2 (2023): 111-130.
9. \*Leiby, Benjamin D., and Darryl K. Ahner, "Multicollinearity applied stepwise stochastic imputation: a large dataset imputation through correlation-based regression," Journal of Big Data 10.1 (2023): 1-20.
10. \*Leiby, Benjamin D., and Darryl K. Ahner, "A Large Dataset Imputation Approach Applied to Country Conflict Prediction Data," International Journal of Mathematical and Computational Sciences 16, no. 3 (2022): 11-17.
11. \*Neumann, Sarah, Darryl Ahner, and Raymond R. Hill, "Forecasting country conflict using statistical learning methods," The Journal of Defense Modeling and Simulation Vol. 6, no. 1 (2022): 59-72.
12. \*Keith, Andrew, and Darryl Ahner, "Counterfactual regret minimization for integrated cyber and air defense resource allocation," European Journal of Operational Research 292.1 (2021): 95-107.
13. \* Keith, Andrew J., and Darryl K. Ahner, "A survey of decision making and optimization under uncertainty," Annals of Operations Research 300.2 (2021): 319-353.

14. \*Shallcross, Nicholas J., and Darryl K. Ahner, "Predictive models of world conflict: accounting for regional and conflict-state differences," *The Journal of Defense Modeling and Simulation* 17.3 (2020): 243-267.
15. Rowell, W., Guldin, S., Thorsen, S., Ahner, D., Defense Acquisition. "Making the Most of Scientific Test and Analysis Techniques," *International Test and Evaluation Association Journal*, Volume 49, Number 1. (2020).
16. \*Kline, Alexander, Darryl Ahner, and Raymond Hill, "The weapon-target assignment problem," *Computers & Operations Research* 105 (2019): 226-236.
17. \*Keith, Andrew, Darryl Ahner, and Raymond Hill, "An order-based method for robust queue inference with stochastic arrival and departure times," *Computers & Industrial Engineering* 128 (2019): 711-726.
18. \*Saie, Cade M., and Darryl K. Ahner, "Investigating the dynamics of nation-building through a system of differential equations," *Journal of the Operational Research Society* 69, no. 4 (2018): 619-629.
19. Ahner, Darryl K., and Richard Spainhour, "Development of Analytical Models of Blue Force Interactions with Improvised Explosive Device Incidents," *Military Operations Research* 20, no. 2 (2015): 5-17.
20. Ahner, Darryl K., and \*Carl R. Parson, "Optimal multi-stage allocation of weapons to targets using adaptive dynamic programming," *Optimization Letters* 9, no. 8 (2015): 1689-1701.