

Danny J. O'Leary

dan.oleary@auburn.edu • 407-399-3189 • 265 Chewacla Drive, Auburn, AL • aub.ie/BlogPortfolioLinks

Developer, Educator, Entrepreneur

Analytical PhD student and proven business leader with 25+ years of experience delivering innovative consumer software products in dynamic markets with cross-discipline teams. Founder and owner-operator of two high-tech companies that generated \$100M+ in revenue. Passionate about growing people; providing tools, knowledge, and confidence required to do work that changes lives, including their own.

Core Competencies

Executive leadership and vision
Innovation and entrepreneurship
Interactive application development
Talent acquisition and team building
Licensing and intellectual property
Analytics, modeling, and visualization

Education

Studying operations research and management science, product innovation and entrepreneurship applying methods from data science, machine learning, modeling, simulation, and visualization.

Doctor of Philosophy, Industrial and Systems Engineering, Auburn University 2022

- Advised by Dr. John Evans, Department Chair, 4.00 / 4.00 GPA
- Dissertation Proposal 2021, Defense 2022 (expected)

Graduate Certificate, Modeling for Data Analytics and Operations, Auburn University May 2021

- Python and R for data analysis, visualization, and machine learning, 4.00 / 4.00 GPA

Master of Engineering Management, Auburn University May 2020

- Systems Engineering Track, 4.00 / 4.00 GPA
- Capstone Project: Supervised machine learning methods using Python & Scikit-Learn

Bachelor of Science, Mechanical Engineering, Auburn University May 1992

Teaching and Research

Collaborate with Auburn's Industrial and Systems Engineering (ISE) Department Chair and Director of its Thomas Walter Center for Technology Management (TWC) to manage, administer, develop, and support graduate and undergraduate programs related to engineering management and high-tech business.

Instructor of Record Fall 2020 – Present

- Undergraduate Business-Engineering-Technology Minor
Redesigning curriculum described below to increase program value, engagement, and enrollment while improving learning outcomes and broadening appeal to students

Teaching Assistant / Lecturer Fall 2018 – Present

- Product Innovation track, Master of Engineering Management
Co-developing new curriculum for graduate-level two class (6 credit) sequence in product design, development, test, manufacturing, and delivery
- Manufacturing and Production Economics
Developed and graded tests and assignments, created and delivered supporting instructional materials for graduate course in corporate finance for engineers
- Undergraduate Business-Engineering-Technology Minor
Administered three class (8 credit) sequence covering innovation, entrepreneurship, early product development, related soft skills; created and delivered course content

Research Assistant**May 2019 – Present**

- Benchmark TWC's offerings against 50+ relevant innovation & product development programs
- Prepared for and conducted on-site interviews at UF, UCF, GA Tech, NCSU, and Duke
- Created background briefs for the TWC Director's visits to UMich and UT Austin
- Interface with regional directors of NSF's I-Corps, DoD's National Security Innovation Network
- Developed goals and timeline for the College of Engineering's Product Innovation Institute, the Dean's five-year, \$30M vision pitched to high-level donors
- Contributed to DHS proposal for Exec MBA focused on Security Technology Transition
- Drafted successful partnering proposal for Georgia Tech's 2020 I-Corps NSF solicitation
- Co-drafted TWC proposal for AU Mission Enhancement Fund (\$300K)

Ph.D. Research**Jan 2020 – Present**

- Assisted ISE faculty prepare, submit, pitch \$50K in MegaGrant proposals; 100% award rate (2/2)
- Campus talk, "Trends and Opportunities in Real-Time Visualization and the Epic MegaGrant Program," presented to ISE Faculty and Advanced Manufacturing Research Group, July 2020

Professional & Entrepreneurial Experience**GUNSTRUCTION, Inc. – Founder and President****September 2012 – Present**

Fund, direct, lead, and administer a distributed team of 3-5 experts in developing and marketing an innovative 3D product configurator for mobile, tablet, and web; top 200 Entertainment app for 5+ years

- Establish and sustain quality standard – 4-star rating on iOS; lifetime average, 600+ user reviews
- Oversee on-going product improvement – deliver 3-5 updates per year with new functionality
- Grow market and engagement – 450K mobile / tablet downloads, 5MM+ interactions per month
- Build and nurture partnerships – nearly 150 licensed manufacturers and retailers
- Lead social media strategy – Facebook and Instagram community exceeds 550K
- Developed and maintain custom analytics system – delivers custom monthly reports to partners

n-Space, Inc. – Co-Founder and CEO**November 1994 – August 2016**

Led, managed, and grew one of the world's most resilient independent game development studios for 22 years, releasing 45 games on 12 platforms with over 20 partners, selling over 10 million units worldwide

- Created an award-winning organization capable of adapting to wide-ranging market demands, delivering games for various demographics in 9 genres, with budgets ranging \$300K to \$12M+
- Managed all production, defined methods, and directed artists, engineers, designers, and production managers over 4 generations of console hardware, on 6 different game engines
- Directed hundreds of game concepts and business proposals, pitched to publishers and investors, negotiated deals and secured contracts, competing against up to 20 other developers
- Established n-Space as a dependable, high-value partner, delivering on-time / budget > 90% and building long-term relationships with top publishers including Activision, Nintendo, and Disney
- Built and protected a tight-knit culture with average tenure over 7 years (2-3x norm), including several 15-20 year employees, in an industry with highest turnover rate in technology (15.5%)
- Developed and refined recruitment practices, bringing in over 200 talented candidates, despite relatively limited budgets, lack of local infrastructure, and minimal public relations investment
- Led through periods of extreme instability, including 2008-9: 2x growth in 9 months (peak of 122 staff on 7 teams), lost CEO to cancer, recession, aborted acquisition, 60% layoff, and rebuilding

GE Aerospace – Training Exercise Designer and Technical Artist**May 1993 – November 1994**

Implemented training scenarios, constructed 3D models and visual effects for various simulations as a contract employee to GE's Simulation and Training division, then a world leader in real-time 3D rendering

- Selected to join an elite team creating "Desert Tank" arcade game with SEGA of Japan
- Parlayed this experience into meetings with Sony, ultimately funding the birth of n-Space

Volunteering, Publications, and Awards

Volunteer Work and Involvement

- Data Science Society of Auburn – Director of Career Programming, November 2020 – Present
- Epsilon Mu Eta Honor Society, Auburn Chapter – Founding member, June 2020 – Present
- Tiger Cage Business Idea Contest – Student Team Advisor, January 2020 – Present
- AU Council of Engineering Grad Students – ISE Department Ambassador, August 2019 – Present
- TigerDev club – Mentor and Guest Speaker, 2018 – Present
- Southeastern Raptor Center, AU College of Veterinary Medicine, Fall – Spring 2017
- Current member of INFORMS, IISE, ASEM, INCOSE, PMI, and ACM professional organizations

Selected Professional Service

- Lecturer, Advisor, and Student Team Judge, Florida Interactive Entertainment Academy at the University of Central Florida, 2004 – 2016, and Full Sail University, 1998 – 2012
- Moderator and Speaker, “Entertainment Panel”, Florida Simulation Summit, National Center for Simulation, September 16th, 2015
- Speaker, GameTech Conference, National Center for Simulation, April 17th, 2013
- Advisor, Orlando Mayor Buddy Dyer, Economic Development Commission Leadership Mission to Montreal’s Cite de Multimedia; a research trip for Orlando’s Creative Village project, 2008

Other Publications and Patents

- Inventor, US Patent 7,497,779, [Video Game Including Time Dilation Effect](#), March 2009
- Contributing Author, [Inside 3D Studio Max, Vol III: Animation](#), New Riders Pub., 1997

Selected Awards and Recognition

- 2020 – Semi-Finalist, Simio Student Simulation Competition, May (9 of 333)
- 2020 – Inducted into Tau Beta Pi, Alpha Pi Mu, and Epsilon Mu Eta honor societies
- 2020 – Outstanding Master’s Student, Auburn University Graduate School (13 of 2620)
- 2019 – Outstanding Master’s Student, Industrial and Systems Engineering Department (1 of 79)
- 2019 – 3rd Place, [Tiger Cage Business Idea Contest](#) – “ParaSky,” an augmented-reality based method to reduce aviation accidents caused by pilot spatial disorientation (20+ competitors)
- 2015 – Sword Coast Legends, 15 E3 awards, including Nerdist.com “[Editor’s Choice](#),” Game Informer “Best in Show Nominee,” MMORPG “[Best RPG](#),” The Escapist “[The Best of E3](#)”
- 2012 – Featured in [Auburn Engineering Magazine](#), Spring / Summer 2012, pp. 14-15, “It’s My Job” segment, a personal profile related to n-Space
- 2011 – William C. Schwartz Industry Innovation Award, presented to n-Space by the Metro Orlando Economic Development Commission for leadership on Nintendo 3DS platform
- 1998 – PlayStation “Shooter of the Year,” awarded to “Duke Nukem: Time to Kill” by Sony Interactive Entertainment; n-Space’s first big critical and commercial success

Training and Coursework

Graduate Coursework

- Data Science and Machine Learning (16 credits)
- Systems Engineering, Project Management, and Lean Production (12 credits)
- Advanced Statistics, Linear Programming, and Simulation (9 credits)
- Human Factors Engineering and Engineering Economic Systems (6 credits)

Relevant Technical Skills

- Python, R, MariaDB / SQL, Scikit-Learn, MS VBA, @Risk, Simio, Unreal Engine

Additional Training

- National Science Foundation’s I-Corps South Instructor Academy at Georgia Tech, May 2020