# Danny J. O'Leary
## Curriculum Vitae

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## EDUCATION

### Ongoing

2022    Ph.D., Industrial and Systems Engineering, Auburn University (4.0 GPA)
      Dissertation Advisor Dr. John Evans, Department Chair
2021    Grad. Cert., Modeling for Data Analytics and Operations (4.0 GPA)

### Completed

2020    Master of Engineering Management, Systems Engineering, Auburn University (4.0 GPA)
1992    B.S., Mechanical Engineering, Auburn University

## PUBLICATIONS

### Web-Based Publications

2020    Research Blog, *Antisimplistic*: https://olearydj.github.io/antisimplistic/

### Other Publications

2009    US Patent 7,497,779, *Video Game Including Time Dilation Effect*, Inventor
1997    Elliott, S. D. (1996). *Inside 3D Studio Max*. New Riders Pub., Contributing Author

## SELECTED AWARDS AND HONORS

2020    Tau Beta Pi, cross-discipline Engineering honor society
2020    Semi-Finalist, Simio Student Simulation Competition, May (9 of 333)
2020    Epsilon Mu Eta, honor society of the American Society for Engineering Management
2020    Alpha Pi Mu, Industrial Engineering honor society
2020    Outstanding Master's Student, Auburn University Graduate School (13 of 2,620)
2019    Outstanding Master's Student, Industrial and Systems Engineering (1 of 79)
2019    3rd Place, Tiger Cage Business Idea Contest, $4,000
2011    William C. Schwartz Industry Innovation Award, Metro Orlando EDC

**GRANTS AND FELLOWSHIPS**

2020    MegaGrant, Epic Games, *Backster 2.0: Next Gen. Visual Tool for Ergonomic Assessment*
        $25,000 awarded August 2020 to Dr. Richard Sesek (PI), Auburn University
        Identified funding source, co-drafted the proposal, assisted with project strategy
2020    MegaGrant, Epic Games, *AR/VR-Based Training in Lean Manufacturing*
        $25,000 awarded May 2020 to Dr. Konstantinos Mykoniatis (PI), Auburn University
        Identified funding source, facilitated discussions, and contributed to proposal


**CONFERENCE PARTICIPATION**

2015    Moderator and Speaker, "Entertainment Panel," Florida Simulation Summit, National
        Center for Simulation, September 16th
2013    Speaker, "Independent Game Development," GameTech Conference, National Center for
        Simulation, April 17th


**CAMPUS TALKS**

2020    *AI and Machine Learning Concepts*
        Presented to the Data Science Society of Auburn, November 9
2020    *Real-Time Visualization and the Epic MegaGrant Program*
        Presented to Industrial and Systems Engineering Faculty, July 13, and again to the
        members of its Advanced Manufacturing Research Group, July 28


**TEACHING EXPERIENCE**

**Graduate Teaching Assistant, Auburn University**                                      **2018 – Present**
Department of Industrial and Systems Engineering (ISE)

<u>Instructor of Record</u>

| | | |
|---|---|---|
| ENGR 3520 | Integrating Business & Engineering Theories with Practice[*] | Fall 2020 |
| ENGR 3560 | Leadership for Business and Engineers[*] | Fall 2020 |

<u>Class Assistant / Lecturer</u>

| | | |
|---|---|---|
| INSY 7730 | Product Design, Development, and Test[††] | Fall 2020 |
| INSY 6600 | Manufacturing and Production Economics[†] | Spring, Summer 2020 |
| ENGR 3510 | Introduction to Business and Engineering[*] | Spring 2019 – 2020 |
| ENGR 3520 | Integrating Business & Engineering Theories with Practice[*] | Fall 2018 – 2019 |
| ENGR 3560 | Leadership for Business and Engineers[*] | Fall 2018 – 2019 |

[*]Undergraduate-level, [†]Combined graduate- and undergraduate-level, [††]Graduate-level

**RESEARCH EXPERIENCE**

**Ph.D. Dissertation, Auburn University**                                    **2020 – Present**
Department of Industrial and Systems Engineering (ISE)

**Graduate Research Assistant, Auburn University**                          **2019 – Present**
Thomas Walter Center for Technology Management (TWC)

Collaborate with TWC's Director to manage, administer, and support programs related to engineering management and high-tech business.

- Redesigning curriculum for three classes in Business-Engineering-Technology Minor
- Benchmarked TWC programs against 50+ relevant offerings at peer / aspirant institutions
- 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 National Science Foundation's I-Corps program and the Department of Defense'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
- Identified and promoted Epic MegaGrant as valuable new research funding pool ($17M)
- Assisted two ISE faculty prepare, submit, and follow-through $50K in grant proposals
- Drafted successful partnering proposal for Georgia Tech's 2020 I-Corps NSF solicitation
- Co-drafted TWC proposal for AU Mission Enhancement Fund ($300K)

**Master of Engineering Management Capstone Project, Auburn University**            **2019**
Department of Industrial and Systems Engineering

Supervised machine learning methods using Python and Scikit-Learn


**SERVICE TO PROFESSION**

Lecturer, Advisor, and Student Team Judge, Florida Interactive Academy at UCF (2004 – 2016)
Guest Speaker and Accreditation Stakeholder, Full Sail University (1998 – 2020)


**UNIVERSITY SERVICE**

Director of Career Programming, Data Science Society of Auburn (2020 – Present)
Founder & President, Epsilon Mu Eta, Auburn University Chapter (June 2020 – Present)
Advisor, BluePrintPal student team, Tiger Cage Business Idea Contest Finalist (2019 – 2020)
Advisor, SafeBoard student team, Tiger Cage Business Idea Contest Semifinalist (2019 – 2020)
ISE Department Ambassador, Council of Engineering Graduate Students (2019 – 2020)
Mentor and Guest Speaker, TigerDev student organization (2018 – 2020)
Volunteer, Southeastern Raptor Center, College of Veterinary Medicine (2017 – 2018)

**ADDITIONAL TRAINING**

2020   NSF I-Corps South Instructor Academy, Georgia Institute of Technology, May 13-15


**RELATED PROFESSIONAL SKILLS**

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


**NONACADEMIC WORK**

2020   Founder and President, GUNSTRUCTION, Inc. (2012 – Present)
       Web- and app-based 3D product configurator; 10M+ interactions / month
2016   Co-Founder and CEO, n-Space, Inc. (1994 – 2016)
       Independent concept-to-completion game development studio; 44 titles shipped
1994   Training Exercise Designer, GE Aerospace (1993 – 1994)
       Modeler and technical artist for military simulators and a commercial project with SEGA


**SELECTED NONACADEMIC PROFESSIONAL SERVICE**

Advisor, Orlando Mayor Buddy Dyer, Economic Development Commission Leadership Mission,
       Cite de Multimedia, Montreal research trip for Orlando's Creative Village (2008)


**TEACHING AREAS**

Innovation, Entrepreneurship, Customer Discovery, Leadership
Engineering Economics, Probability & Statistics
Python, R, and Software Carpentry for Scientific Computing
Data Science, Analytics, Machine Learning
Simulation, Visualization


**PROFESSIONAL MEMBERSHIPS**

Project Management Institute (PMI)
International Council on Systems Engineering (INCOSE)
The Institute for Operations Research and the Management Sciences (INFORMS)
American Society for Engineering Management (ASEM)
Institute of Industrial and Systems Engineers (IISE)
Association for Computing Machinery (ACM)

**ACADEMIC REFERENCES**

John Evans, Ph.D.
Department Chair, Industrial and Systems Engineering
Director, Thomas Walter Center for Technology Management
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334-844-1418

Richard Sesek, Ph.D.
Tim Cook Associate Professor
3341-A Shelby Center
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334-728-1438

Jeffrey Smith, Ph.D.
Joe W. Forehand Jr. Professor
3306 Shelby Center
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334-707-2525

**PROFESSIONAL REFERENCES**

Available upon request.