Paul T. Grogan
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Appointments and Positions

Arizona State University *Tempe, Arizona*	*Associate Professor, School of Computing and Augmented Intelligence, Ira A. Fulton Schools of Engineering*	*Aug. 2023–Present*
Stevens Institute of Technology *Hoboken, New Jersey*	*Associate Professor, School of Systems and Enterprises* *Assistant Professor, School of Systems and Enterprises*	*Jan. 2023–Aug. 2023* *Jan. 2016–Dec. 2022*

Education and Professional Preparation

Massachusetts Institute of Technology *Cambridge, Massachusetts*	*Postdoctoral Research Associate, Institute for Data, Systems & Society* *Ph.D. Engineering Systems (Supervisor: O.L. de Weck)* *S.M. Aeronautics & Astronautics*	*Jul. 2014–Dec. 2015* *Jun. 2014* *Sep. 2010*
University of Wisconsin *Madison, Wisconsin*	*B.S. Engineering Mechanics (Astronautics), Double Major in Mathematics (Applied), Certificate in Computer Science, Engineering Honors in Liberal Arts*	*May 2008*

Publications

Summary: 34 refereed articles; 3 book chapters; 45 refereed conference proceedings; 23 other contributions; 105 total.

Refereed Journal Articles

1. A. Z. Avşar and P. T. Grogan, "Team performance and the locus of control personality trait: The moderating role of task complexity in engineering design," *Research in Engineering Design*, 2026, Accepted.
2. J. I. Tapia, S. Kumar, and P. T. Grogan, "Scalable model-centric engineering analysis workflows using distributed task queues with TAT-C," *Journal of Aerospace Information Systems*, vol. 22, no. 11, pp. 973–982, 2025
3. M. Zarreh and P. T. Grogan, "Strategic engineering design in water infrastructure: A game-theoretic approach and network topology for flood irrigation systems," *Water Resources Management*, vol. 39, pp. 7263–7281, 2025
4. J. L. F. P. Cardoso, P. T. Grogan, and M. J. Pennock, "Interoperability problems in cyber-physical systems: Empirical cases from the OpenWrt project," *IEEE Systems Journal*, vol. 18, no. 3, pp. 1658–1668, 2024
5. A. Valencia-Romero and P. T. Grogan, "The strategy dynamics of collective systems: The underlying hindrances beyond two-actor coordination," *PLOS ONE*, vol. 19, no. 4, e0301394, 2024
6. A. Z. Avşar and P. T. Grogan, "Identification of design strategies and their effects on performance outcomes in pair parameter design tasks," *Journal of Mechanical Design*, vol. 146, no. 5, pp. 051 401–1–9, 2024
7. J. L. Stern, A. Siddiqi, and P. T. Grogan, "Effects of individual strategies for resource access on collaboratively maintained irrigation infrastructure," *Systems Engineering*, vol. 26, no. 6, pp. 874–890, 2023
8. A. Z. Avşar and P. T. Grogan, "Effects of differential risk attitudes in collaborative systems design," *Systems Engineering*, vol. 26, no. 6, pp. 770–782, 2023 **(Editor's Choice, November 2023)**
9. R. Andrade, P. Grogan, and S. Moazeni, "Simulation-based assessment of data-driven processes in customer support systems," *IEEE Open Journal of Systems Engineering*, vol. 1, pp. 50–59, 2023
10. B. Chell, M. LeVine, L. Capra, J. J. Sellers, and P. T. Grogan, "New observing strategies testbed: A digital prototyping platform for distributed space missions," *Systems Engineering*, vol. 26, no. 5, pp. 519–530, 2023
11. J. F. Anderson, M.-A. Cardin, and P. T. Grogan, "Design and analysis of flexible multi-layer staged deployment for satellite mega-constellations under demand uncertainty," *Acta Astronautica*, vol. 198, pp. 179–193, 2022
12. J. L. Stern and P. T. Grogan, "Federated space systems trade-space exploration for strategic robustness," *Journal of Spacecraft and Rockets*, vol. 59, no. 4, pp. 1240–1254, 2022
13. J. L. Stern, A. Valencia-Romero, and P. T. Grogan, "Strategic robustness in bi-level collaborative systems design," *Design Science*, vol. 8, no. e6, pp. 1–31, 2022
14. B. M. Gardner and P. T. Grogan, "Probabilistic launch delay models for human spaceflight missions," *Journal of Spacecraft and Rockets*, vol. 58, no. 5, pp. 1563–1567, 2021
15. P. T. Grogan, "Perception of complexity in engineering design," *Systems Engineering*, vol. 24, no. 4, pp. 221–233, 2021
16. P. T. Grogan, "Co-design and co-simulation for engineering systems: Insights from the Sustainable Infrastructure Planning Game," *Design Science*, vol. 7, no. e11, pp. 1–45, 2021

17. H. Chen, B. M. Gardner, P. T. Grogan, and K. Ho, "Flexibility management for space logistics through decision rules," *Journal of Spacecraft and Rockets*, vol. 58, no. 5, pp. 1314–1324, 2021
18. J. Thekinen and P. T. Grogan, "Information exchange patterns in digital engineering: An observational study using web-based virtual design studio," *Journal of Computing and Information Science in Engineering*, vol. 21, no. 4, pp. 041 012–1–14, 2021
19. A. Valencia-Romero and P. T. Grogan, "Structured to succeed?: Strategy dynamics in engineering systems design and their effect on collective performance," *Journal of Mechanical Design*, vol. 142, no. 12, pp. 121 404–1–14, 2020
20. A. Chaudhari, E. L. Gralla, Z. Szajnfarber, P. T. Grogan, and J. H. Panchal, "Designing representative model worlds to study socio-technical phenomena: A case study of communication patterns in engineering systems design," *Journal of Mechanical Design*, vol. 142, no. 12, pp. 121 403–1–17, 2020
21. Z. Szajnfarber, P. T. Grogan, J. H. Panchal, and E. Gralla, "A call for consensus on the use of representative model worlds in systems engineering and design," *Systems Engineering*, vol. 23, no. 4, pp. 436–442, 2020
22. A. Ehsanfar and P. T. Grogan, "Auction-based algorithms for routing and task scheduling in federated networks," *Journal of Network and Systems Management*, vol. 28, pp. 271–297, 2020
23. A. Ehsanfar and P. T. Grogan, "Mechanism design for exchanging resources in federated networks," *Journal of Network and Systems Management*, vol. 28, pp. 108–132, 2020
24. P. T. Grogan and A. Valencia-Romero, "Strategic risk dominance in multi-actor engineered systems," *Design Science*, vol. 5, no. e24, pp. 1–28, 2019
25. M. Törngren and P. T. Grogan, "How to deal with the complexity of future cyber-physical systems?"
26. P. T. Grogan, K. Ho, A. Golkar, and O. L. de Weck, "Multi-actor value modeling for federated systems," *IEEE Systems Journal*, vol. 12, no. 2, pp. 1193–1202, 2018
27. P. T. Grogan, "Data on multi-actor parameter design tasks by engineering students with variable problem size, coupling, and team size," *Data in Brief*, vol. 20, pp. 1079–1084, 2018
28. P. T. Grogan and O. L. de Weck, "Infrastructure system simulation interoperability using the High Level Architecture," *IEEE Systems Journal*, vol. 12, no. 1, pp. 103–114, 2018
29. P. T. Grogan and S. A. Meijer, "Gaming methods in engineering systems research," *Systems Engineering*, vol. 20, no. 6, pp. 542–552, 2017
30. P. T. Grogan and O. L. de Weck, "Collaboration and complexity: An experiment on the effect of multi-actor coupled design," *Research in Engineering Design*, vol. 27, no. 3, pp. 221–235, 2016
31. P. T. Grogan and O. L. de Weck, "The ISoS modeling framework for infrastructure systems simulation," *IEEE Systems Journal*, vol. 9, no. 4, pp. 1139–1150, 2015
32. H. K. Yue, P. T. Grogan, and O. L. de Weck, "Logistical analysis of a flexible human and robotic Mars exploration campaign," *Journal of Spacecraft and Rockets*, vol. 51, no. 2, pp. 640–645, 2014
33. A. Adepetu, P. T. Grogan, A. Alfaris, D. Svetinovic, and O. L. de Weck, "Functional and spatial system model for city infrastructure systems: A City.Net IES case study," *Systems Engineering*, vol. 17, no. 1, pp. 62–76, 2014
34. P. T. Grogan, A. Siddiqi, and O. L. de Weck, "Matrix methods for optimal manifesting of multi-node space exploration systems," *Journal of Spacecraft and Rockets*, vol. 48, no. 4, pp. 679–690, 2011

Book Chapters

1. J. L. de Rosario, P. Grogan, A. Golkar, A. Farid, Y.-J. Son, N. Egin, and J. Little, "Novel analysis, modeling, and simulation methods for SoS," in *Systems Engineering Applied to SoS*, A. Salado, Ed. Isdefe, 2025, vol. 2
2. P. T. Grogan, "Evolving university programs on systems engineering," in *Systems Engineering in the Digital Age: Practitioner Perspectives*, D. Verma, Ed. Wiley, 2023, ch. 40, pp. 817–826
3. J. H. Panchal and P. T. Grogan, "Designing for technical behaviour," in *Handbook of Engineering Systems Design*, A. Meijer, J. Oehmen, and P. Vermaas, Eds. Springer, 2021, ch. 19, pp. 1–30

Refereed Conference Proceedings

1. D. Fornos, D. Selva, A. Demagall, P. Grogan, and V. Ravindra, "Flexible open-source tool ecosystem for automated tradespace analysis and exploration of earth observation missions," in *2025 IEEE International Geoscience and Remote Sensing Symposium*, Brisbane, Australia, Aug. 2025, pp. 5687–5691
2. E. Gonzalez, P. Grogan, D. B. Karakoc, H. Mizuyama, M. Sato, S. Suginouchi, and M. Zarreh, "Modeling and comparison of U.S. and Japanese lettuce supply chain system architecture," in *Advances in Production Management Systems. Cyber-Physical-Human Production Systems: Human-AI Collaboration and Beyond. APMS 2025*, H. Mizuyama, E. Morinaga, T. Nonaka, T. Kaihara, G. von Cieminski, and D. Romero, Eds., vol. 767, Cham: Springer Nature Switzerland, Aug. 2025, pp. 258–272

3. Y. Hou and P. T. Grogan, "Space logistics in the moon-to-mars architecture: Functional coverage, interdependency and modularity analysis," in *2025 Conference on Systems Engineering Research*, Los Angeles, CA, Mar. 2025
4. N. Esmaeili and P. T. Grogan, "Evaluating earth-observing satellite sampling effectiveness using kullback-leibler divergence," in *2025 Conference on Systems Engineering Research*, Los Angeles, CA, Mar. 2025
5. A. Z. Avşar and P. T. Grogan, "Communicating the intention: A communication channel designed for exchanging information about intentions in collaborative systems," in *ASEM International Annual Conference*, Virginia Beach, VA, Nov. 2024
6. J. D. Caddell, A. Bayazid, P. Grogan, and R. Nilchiani, "Simulating the emergent social networks of army units," in *Proceedings of the 2024 Conference on Systems Engineering Research*, A. Salado, R. Valerdi, R. Steiner, and L. Head, Eds., Springer, 2024, pp. 199–212
7. J. I. Tapia and P. T. Grogan, "Dynamic targeting for precipitation observing missions: Integrating the GEOS-5 nature run data set," in *2023 IEEE International Geoscience and Remote Sensing Symposium*, Pasadena, CA, Jul. 2023
8. J. Bardaji, A. Bayazid, J. I. Tapia, E. Cho, C. Vuyovich, and P. T. Grogan, "Constellation evaluation tools for a new snow observing strategy," in *2023 IEEE International Geoscience and Remote Sensing Symposium*, Pasadena, CA, Jul. 2023
9. J. I. Tapia and P. T. Grogan, "Efficient coverage methods for earth observing tradespace analysis," in *2023 IEEE International Systems Conference (SysCon)*, Vancouver, Canada, Apr. 2023
10. P. T. Grogan and J. I. Tapia, "Using JSON Schema to model satellite systems in the Tradespace Analysis Tool for Constellations," in *Proceedings of the 2023 Conference on Systems Engineering Research*, D. Verma, A. M. Madni, S. Hoffenson, and L. Xiao, Eds., Springer, 2024, pp. 47–65
11. J. I. Tapia and P. T. Grogan, "Analysis of ground network selection for data latency in precipitation-observing space missions," in *2023 IEEE Aerospace Conference*, Big Sky, MT, Mar. 2023
12. A. Z. Avşar, J. L. Stern, and P. T. Grogan, "Measuring risk attitudes for strategic decision-making in a collaborative engineering design process," in *2022 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, St. Louis, MO, Aug. 2022
13. J. Thekinen and P. T. Grogan, "Effects of augmented information system on design communication: A human-subject study using aircraft design studio," in *2022 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, St. Louis, MO, Aug. 2022
14. M. J. LeVine, B. Chell, L. Capra, J. J. Sellers, and P. T. Grogan, "Planning, implementing, and executing test campaigns with the New Observing Strategies Testbed (NOS-T): The FireSat+ example," in *2022 IEEE International Geoscience and Remote Sensing Symposium*, Kuala Lumpur, Malaysia, Jul. 2022
15. M. Seablom, J. Le Moigne, S. Kumar, B. Forman, and P. Grogan, "Real-time applications of the NASA Earth Science "New Observing Strategy"," in *2022 IEEE International Geoscience and Remote Sensing Symposium*, Kuala Lumpur, Malaysia, Jul. 2022
16. B. Smith, S. Kumar, L. Nguyen, T. Chee, J. Mason, S. Chien, C. Frost, R. Akbar, M. Moghaddam, A. Getirana, L. Capra, and P. Grogan, "Demonstrating a new flood observing strategy on the NOS Testbed," in *2022 IEEE International Geoscience and Remote Sensing Symposium*, Kuala Lumpur, Malaysia, Jul. 2022
17. B. Chell, M. J. LeVine, L. Capra, J. J. Sellers, and P. T. Grogan, "Conceptual design of space missions integrated with real-time, in situ sensors," in *Transdisciplinary Engineering 2022: The Future of Engineering*, B. R. Moser, P. Koomsap, and J. Stjepandić, Eds., ser. Advances in Transdiciplinary Engineering, vol. 28, IOS Press, 2022, pp. 350–359
18. A. Z. Avşar, S. S. Chiesi, and P. T. Grogan, "Effects of data exchange methods on perceived risk and trust in digital engineering," in *Transdisciplinary Engineering 2022: The Future of Engineering*, B. R. Moser, P. Koomsap, and J. Stjepandić, Eds., ser. Advances in Transdiciplinary Engineering, vol. 28, IOS Press, 2022, pp. 249–258
19. H. Behrooz, Y. M. Hayeri, and P. T. Grogan, "A discrete-time simulation model for NYC bike-share system," in *2022 International Conference on Transportation & Development*, Seattle, WA, May 2022
20. S. S. Chiesi and P. T. Grogan, "A surrogate model approach for studying performance cycle time in complex system development," in *32nd Annual INCOSE International Symposium*, Detroit, MI, Jun. 2022
21. I. J. Tapia-Tamayo and P. T. Grogan, "Tradespace analysis of cross-calibration in missions observing ocean color," in *2022 IEEE International Systems Conference (SysCon)*, Virtual, Online, Apr. 2022
22. J. L. Stern and P. T. Grogan, "Sampling evaluation to measure observing system representativeness," in *2021 IEEE International Geoscience and Remote Sensing Symposium*, Virtual, Online, Jul. 2021
23. P. T. Grogan, H. C. Daly, M. S. Brand, and J. J. Sellers, "New Observing Strategies Testbed (NOS-T) architecture: Evaluating dynamic response to emergent events," in *2021 IEEE International Geoscience and Remote Sensing Symposium*, Virtual, Online, Jul. 2021

24. P. T. Grogan and J. L. Stern, "Coordinating observation at global and local scales: Service-oriented platform to evaluate mission architectures," in *2020 IEEE International Geoscience and Remote Sensing Symposium*, Virtual, Online, Sep. 2020
25. A. Avşar and P. T. Grogan, "Effects of Locus of Control personality trait on team performance in cooperative engineering design tasks," in *2020 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, Virtual, Online, Aug. 2020
26. H. C. Daly and P. T. Grogan, "Towards a reference architecture for digital and model-based engineering information systems," in *Recent Trends and Advances in Model Based Systems Engineering*, A. M. Madni, B. Boehm, D. Erwin, M. Moghaddam, M. Sievers, and M. Wheaton, Eds., Springer, 2022, pp. 3–13
27. A. Avşar, A. Valencia-Romero, and P. T. Grogan, "The effects of Locus of Control and Big Five personality traits on collaborative engineering design tasks with negotiation," in *2019 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, Anaheim, CA, Aug. 2019
28. P. T. Grogan, "Modeling challenges for Earth observing systems of systems," in *2019 IEEE International Geoscience and Remote Sensing Symposium*, Yokohama, Japan, Jul. 2019
29. P. T. Grogan and O. L. de Weck, "LEGO product design and manufacturing simulations for engineering design and systems engineering education," in *2019 ASEE Annual Conference & Exposition*, Tampa, FL, Jun. 2019
30. P. T. Grogan, "Stag hunt as an analogy for system-of-systems engineering," in *Procedia Computer Science: 17th Annual Conference on Systems Engineering Research (CSER)*, P. Korfiatis, M. J. Pennock, and A. Salado, Eds., vol. 153, 2019, pp. 177–184
31. A. Valencia-Romero and P. T. Grogan, "Toward a model-based experimental approach to assessing collective systems design processes," in *2018 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, Québec City, Canada, Aug. 2018
32. P. T. Grogan and A. E. Bayrak, "Operational and strategic decisions in engineering design games," in *2018 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, Québec City, Canada, Aug. 2018
33. T. Alelyani, Y. Yang, and P. T. Grogan, "Understanding designers' behaviors in parameter design activities," in *2017 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, Cleveland, OH, Aug. 2017
34. J. Le Moigne, P. Dabney, O. de Weck, V. Foreman, P. Grogan, M. Holland, S. Hughes, and S. Nag, "Tradespace analysis tool for designing constellations (TAT-C)," in *2017 IEEE International Geoscience and Remote Sensing Symposium*, Fort Worth, TX, Jul. 2017
35. A. W. Johnson, S. Willner-Giwerc, P. T. Grogan, and E. E. Danahy, "Pre-college students' use of systems engineering methods in design," in *2016 IEEE Frontiers in Education Conference*, Erie, PA, Oct. 2016
36. A. W. Johnson, S. Willner-Giwerc, and P. T. Grogan, "Developing a systems engineering activity for middle school students using LEGO robotics," in *2016 ASEE Annual Conference & Exposition*, New Orleans, LA, 2016. [Online]. Available: https://www.asee.org/public/conferences/64/papers/15529/view
37. P. T. Grogan and O. L. de Weck, "Collaborative design in the sustainable infrastructure planning game," in *2016 Spring Simulation Multi-Conference, Annual Simulation Symposium*, Pasadena, CA, Apr. 2016 **(Best Paper Award)**
38. P. T. Grogan, K. Ho, A. Golkar, and O. L. de Weck, "Bounding the value of collaboration in federated systems," in *2016 IEEE International Systems Conference*, Orlando FL, Apr. 2016
39. P. T. Grogan, O. L. de Weck, A. M. Ross, and D. H. Rhodes, "Interactive models as a system design tool: Applications to system project management," in *Procedia Computer Science: 2015 Conference on Systems Engineering Research*, J. Wade and R. Cloutier, Eds., vol. 44, 2015, pp. 285–294
40. P. T. Grogan and O. L. de Weck, "Interactive simulation games to assess federated satellite system concepts," in *2015 IEEE Aerospace Conference*, Big Sky, MT, Mar. 2015
41. I. Lluch, P. T. Grogan, U. Pica, and A. Golkar, "Simulating a proactive ad-hoc network protocol for federated satellite systems," in *2015 IEEE Aerospace Conference*, Big Sky, MT, Mar. 2015
42. P. T. Grogan, A. Golkar, S. Shirasaka, and O. L. de Weck, "Multi-stakeholder interactive simulation for federated satellite systems," in *2014 IEEE Aerospace Conference*, Big Sky, MT, Mar. 2014
43. C. Lee, P. T. Grogan, and O. L. de Weck, "Process-oriented evaluation of user interactions in integrated system analysis tools," in *IEEE International Conference on Systems, Man, and Cybernetics*, Seoul, South Korea, Oct. 2013
44. P. T. Grogan and O. L. de Weck, "An integrated modeling framework for infrastructure system-of-systems simulation," in *2013 IEEE International Systems Conference*, Orlando, FL, Apr. 2013

45. A. Adepetu, P. T. Grogan, A. Alfaris, D. Svetinovic, and O. L. de Weck, "City.Net IES: A sustainability-oriented energy decision support system," in *2012 IEEE International Systems Conference*, Vancouver, Canada, Mar. 2012

Non-refereed Conference Proceedings and Extended Abstracts

1. Y. Hou and P. Grogan, "From terrestrial to space logistics: A transfer framework for logistics artifacts," in *2026 AIAA SciTech Forum*, Orlando, FL, Jan. 2026
2. P. T. Grogan, S. Bentley, G. Lordos, K. Latyshev, I. M. Brown, and O. L. de Weck, "Space logistics exploration campaign scenario specification for SpaceNet," in *2024 AIAA SciTech Forum*, Orlando, FL, Jan. 2024
3. M. J. LeVine, B. Chell, and P. T. Grogan, "Leveraging a digital engineering testbed to explore mission resilience for new observing strategies," in *2023 AIAA SciTech Forum*, National Harbor, MD, Jan. 2023
4. L. Capra, M. J. LeVine, and P. T. Grogan, "Demonstration of a utility-based priority algorithm for filtering commercial satellite tasking requests," in *2023 AIAA SciTech Forum*, National Harbor, MD, Jan. 2023
5. P. T. Grogan, M. LeVine, B. Chell, L. Capra, and J. J. Sellers, "New Observing Strategies Testbed: Co-simulation for Earth science technology demonstration," in *SISO Simulation Innovation Workshop*, Virtual, Online, Feb. 2022
6. L. Capra, J. Hilton, S. Bentley, T. Sherman, A. Alfaro, R. Savin, O. L. de Weck, and P. T. Grogan, "SpaceNet Cloud: Web-based modeling and simulation analysis for space exploration logistics," in *AIAA ASCEND 2021*, Virtual, Online, Nov. 2021
7. J. Laughland and P. T. Grogan, "Analyzing the calibration and validation support architecture for CYGNSS as a design problem," in *AIAA ASCEND 2020*, Virtual, Online, Nov. 2020
8. H. Chen, B. M. Gardner, P. T. Grogan, and K. Ho, "Flexibility management for space logistics through decision rules," in *AIAA ASCEND 2020*, Virtual, Online, Nov. 2020
9. T. Alelyani, P. T. Grogan, Y. Tausczik, and Y. Yang, "Software crowdsourcing design: An experiment on the relationship between task design and crowdsourcing performance," in *Human Computer Interaction International 2020*, Virtual, Online, Jul. 2020
10. S. S. Chiesi and P. T. Grogan, "Modeling spacecraft design activities as rugged fitness landscapes," in *2019 AIAA Scitech Forum*, San Diego, CA, Jan. 2019
11. L. Portelli, M. Sabatini, and P. T. Grogan, "Ontology development for knowledge-driven distributed space mission systems engineering," in *2019 AIAA Scitech Forum*, San Diego, CA, Jan. 2019
12. H. P. L. Lee and P. T. Grogan, "Measuring strategic risk dominance using the multi-actor value model: A study of the National Polar-orbiting Operational Environmental Satellite System," in *2019 AIAA Scitech Forum*, San Diego, CA, Jan. 2019
13. H. Chen, K. Ho, B. M. Gardner, and P. T. Grogan, "Built-in flexibility for space logistics mission planning and spacecraft design," in *AIAA SPACE and Astronautics Forum and Exposition 2017*, Orlando, FL, Sep. 2017
14. P. T. Grogan and O. L. de Weck, "Strategic engineering gaming for improved design and interoperation of infrastructure systems," in *Third International Engineering Systems Symposium*, Delft, Netherlands, Jun. 2012
15. P. T. Grogan and O. L. de Weck, "Multi-stakeholder gaming and simulation environment for a future resource economy in space," in *Global Space Exploration Conference*, Washington, D.C., May 2012
16. P. T. Grogan and O. L. de Weck, "Federated simulation and gaming framework for a decentralized space-based resource economy," in *ASCE Earth and Space 2012 Conference*, Pasadena, CA, Apr. 2012
17. P. T. Grogan, C. Lee, and O. L. de Weck, "Comparative usability study of two space logistics analysis tools," in *AIAA Space 2011 Conference and Exposition*, Long Beach, CA, Sep. 2011
18. P. T. Grogan, H. K. Yue, and O. L. de Weck, "Space logistics modeling and simulation analysis using SpaceNet: Four application cases," in *AIAA Space 2011 Conference and Exposition*, Long Beach, CA, Sep. 2011
19. N. Essilfie-Conduah, P. T. Grogan, P. M. Cunio, R. McLinko, and O. L. de Weck, "A university perspective on the NASA/SISO smackdown modeling and simulation outreach event," in *2011 Fall Simulation Interoperability Workshop*, Orlando, FL, Sep. 2011
20. P. T. Grogan, A. Siddiqi, and O. L. de Weck, "Matrix methods for optimal manifesting of multi-node space exploration systems," in *AIAA Space 2010 Conference and Exposition*, Anaheim, CA, Aug. 2010
21. I. Ferreira and P. T. Grogan, "Data management, collaboration, model integration for space exploration system analysis and design," in *AIAA Space 2010 Conference and Exposition*, Anaheim, CA, Aug. 2010
22. M. G. O'Neill, H. Yue, S. Nag, P. T. Grogan, and O. L. de Weck, "Comparing and optimizing the DARPA System F6 program value-centric design methodologies," in *AIAA Space 2010 Conference and Exposition*, Anaheim, CA, Aug. 2010
23. P. T. Grogan, O. L. de Weck, N. Armar, T. Ishimatsu, A. Siddiqi, G. Lee, E. Jordan, and R. Shishko, "A flexible architecture and object-oriented model for space logistics simulation," in *AIAA Space 2009 Conference and Exposition*, Pasadena, CA, Sep. 2009

Media Appearances

1. "Professor speaks on Shatner's trip to space and Blue Origin," *Daily Mail*, Oct. 12, 2021.
2. Quoted in "How NASA Cleared the Artemis Rocket for Launch Despite Hurricane Nicole Damage," *Popular Mechanics*, Nov. 15, 2022. https://www.popularmechanics.com/space/rockets/a41971415/artemis-1-ready-for-launch-after-hurricane-damage/

Research Grants and Contracts

Summary: $2.3M active; $3.2M completed; $5.5M total.

1. "Digital Twin Scenario Engine for Substation Construction Schedules," Salt River Project, P.T. Grogan (PI), G. Runger (Co-PI). Aug. 2025–Jul. 2026, $69,993. Project No. FP00046820.
2. "Event- and Feature-Based Observing System Design: Quantifying Science and Applications Benefit for Diverse Measurement Combinations,", National Aeronautics and Space Administration, P.T. Grogan (Co-I). Oct. 2025–Oct. 2027, $300,000. Sub-contract No. 1725054, Jet Propulsion Laboratory, AIST-23, PI: Derek Posselt.
3. "3D-CHESS: Decentralized, Distributed, Dynamic and Context-aware Heterogeneous Sensor Systems,", National Aeronautics and Space Administration, P.T. Grogan (Co-I), Feb. 2024–Jan. 2025, $75,000. Sub-award No. M2403907, Texas A&M University, PI: Daniel Selva.
4. "Digital Twin Scenario Engine (DiTSE) for High-Impact, Low-Frequency Event Assessment," Salt River Project, P.T. Grogan (PI), G. Runger (Co-PI). Aug. 2024–Jul. 2025, $66,825. Project No. FP00043142.
5. "New Observing Strategies Testbed (NOS-T) Development and Demonstration,", National Aeronautics and Space Administration, P.T. Grogan (PI), May 2024–Apr. 2029, $1,205,701. Grant No. 80NSSC24K0875.
6. "An OSSE Framework for the NASA PBL Incubation Activity," National Aeronautics and Space Administration,", National Aeronautics and Space Administration, P.T. Grogan (Co-I), Oct. 2022–Oct. 2025, $210,000. Sub-contract Nos. 1686623 & 1704657, Jet Propulsion Laboratory, DSI-21, PI: Derek Posselt.
7. "Observing System Simulation Experiment Tradespace Capability for NOAA's Future Mission Design," National Oceanographic and Atmospheric Administration, P.T. Grogan (Co-PI), Sep. 2022–Aug. 2024, $129,928. Sub-contract Nos. 1689594 & 1705655 for Jet Propulsion Laboratory, PI: Derek Posselt.
8. "A New Snow Observing Strategy in Support of Hydrological Science and Applications," National Aeronautics and Space Administration, P.T. Grogan (Co-PI), Aug. 2022–Aug. 2026, $300,000. Grant Nos. 80NSSC22K1705 & 80NSSC24K0575, Goddard Space Flight Center, AIST-21, PI: Carrie Vuyovich.
9. "WRT-1049: Data-Driven Capability Portfolio Management Pilot," U.S. Department of Defense via Acquisition Innovation Research Center, Contract No. HQ003419D0003, Order HQ003421F0309, P.T. Grogan (Co-I), Jul. 2021–Sep. 2022, $100,000. Sub-award for Systems Engineering Research Center, PIs: D. DeLaurentis and J. Panchal.
10. "Co-simulation for Partnerships to Observe Convective Storm Systems," National Aeronautics and Space Administration, P.T. Grogan (PI), Jul. 2021–Dec. 2025, $375,000. Grant Nos. 80NSSC21K1515 & 80NSSC24K0921.
11. "CAREER: Understanding Strategic Dynamics in the Engineering of Decentralized Systems," National Science Foundation, P.T. Grogan (PI), Sep. 2020–May 2026, $500,000. Grant Nos. 1943433 & 2422337.
12. "ART-015: New Observing Strategies Testbed (NOS-T) Design and Development" U.S. Department of Defense for NASA Earth Science Technology Office via Systems Engineering Research Center, Contract No. W15QKN18D0040, Delivery Order W15QKN20F0551, P.T. Grogan (PI), Aug. 2020–Aug. 2023, $965,091.
13. "Integrating TAT-C, STARS, and VCE for New Observing Strategies Mission Design," NASA Earth Science Technology Office, Grant No. 80NSSC20K1118, P.T. Grogan (PI), Co-I: J. Johnson, M. French, M. Paolieri, Jun. 2020–Apr. 2022, $264,880.
14. "Mission Engineering for Multi-domain Operations (MEMO)," Lockheed Martin Corporation, P.T. Grogan (PI), Co-PI: B. Fidler, May 2020–Jan. 2021, $71,471.
15. "Future Engineers as Augmented Teams (FEAT)," Lockheed Martin Corporation, P.T. Grogan (PI), Nov. 2018–Jan. 2020, $292,273.
16. "EAGER: Collaborative Research: Demonstrating the Importance of Research Setting Representativeness in Systems Engineering and Design Research," National Science Foundation, Grant No. 1841109, P.T. Grogan (Co-PI), PI: Z. Szajnfarber, Co-PIs: E. Gralla, J. Panchal, Sep. 2018–Aug. 2020, $55,571.
17. "Knowledge Representation for Distributed Space Mission Design using TAT-C with Machine Learning," National Aeronautics and Space Administration, Grant No. 80NSSC17K0586, P.T. Grogan (Co-I to Oct. 2018, Co-PI from Oct. 2018), Oct. 2017–Sep. 2019, $219,876. Sub-award for Goddard Space Flight Center, AIST-16, PI: J. Le Moigne (to Oct. 2018), J. Verville (from Oct. 2018).

18. "EAGER: Model-based Foundations of Collective Systems Design," National Science Foundation, Grant No. 1742971, P.T. Grogan (PI), Sep. 2017–Aug. 2020, $117,895.

19. "RT-207: Game-theoretic Risk Assessment for Distributed Systems (GRADS)," U.S. Department of Defense via Systems Engineering Research Center, Contract No. HQ003413D0004, Delivery Order HQ064288204, P.T. Grogan (PI), Jul. 2018–Jul. 2019, $163,518.

20. "RT-180: Game-theoretic Risk Assessment for Distributed Systems (GRADS)," Incubator Project (Competed within SERC), U.S. Department of Defense via Systems Engineering Research Center, Contract No. HQ003413D0004, Delivery Order HQ003417F0286, P.T. Grogan (PI), Jun. 2017–Nov. 2017, $19,978. Sub-award for Systems Engineering Research Center, PI: J. Wade.

21. "Knowledge Base for Designing Earth Science Distributed Missions," National Aeronautics and Space Administration, Grant No. NNX17AE06G, P.T. Grogan (Co-I), Jan. 2017–Jul. 2017, $81,995. Sub-award for Goddard Space Flight Center, AIST-14, Tradespace Analysis Tool for Constellations (TAT-C), PI: J. Le Moigne.

Teaching Experience

Summary: 4.92/5.00 cumulative instructor rating; 594/770 (77%) responses.

Course (Modality), Term at Arizona State University	*(Responses) Overall Rating*
IEE 505 Information Systems Engineering (In-person), SP25	*(9/9) 4.59/5.00*
IEE 305 Information Systems Engineering (Online), SP25	*(5/10) 4.89/5.00*
IEE 305 Information Systems Engineering (In-person), SP25	*(31/73) 4.60/5.00*
IEE 545 Advanced Simulating Stochastic Systems (Online), FA24	*(26/41) 4.87/5.00*
IEE 545 Advanced Simulating Stochastic Systems (In-person), FA24	*(12/18) 4.94/5.00*
ASU 101 The ASU Experience (In-person), FA24	*(28/36) 4.82/5.00*
IEE 545 Advanced Simulating Stochastic Systems (In-person), FA23	*(11/12) 4.91/5.00*

Course (Modality), Term at Stevens Institute of Technology	*(Responses) Overall Rating*
SYS 611 Systems Modeling & Simulation (In-person), SP23	*(17/25) 4.94/5.00*
EM 365 Statistics for Engineering Management (with Lab) (In-person), FA22	*(17/25) 5.00/5.00*
EM 364 Statistics for Engineering Management (Lab Only) (In-person), FA22	*(0/2) NA/5.00*
SYS 611 Systems Modeling & Simulation (In-person), FA22	*(22/31) 4.77/5.00*
SYS 611 Systems Modeling & Simulation (In-person), SP22	*(22/32) 5.00/5.00*
EM 365 Statistics for Engineering Management (with Lab) (In-person), FA21	*(22/29) 4.82/5.00*
EM 364 Statistics for Engineering Management (Lab Only) (In-person), FA21	*(2/2) 5.00/5.00*
SYS 611 Systems Modeling & Simulation (In-person), FA21	*(28/30) 4.96/5.00*
SYS 611 Systems Modeling & Simulation (In-person), SP21	*(26/32) 4.92/5.00*
EM 365 Statistics for Engineering Management (with Lab) (In-person), FA20	*(23/28) 4.96/5.00*
EM 364 Statistics for Engineering Management (Lab Only) (In-person), FA20	*(5/7) 5.00/5.00*
SYS 611 Systems Modeling & Simulation (In-person), FA20	*(33/37) 4.88/5.00*
SYS 611 Systems Modeling & Simulation (In-person), FA19	*(28/34) 4.82/5.00*
SYS 611 Systems Modeling & Simulation (Online), FA19	*(39/44) 4.77/5.00*
SYS 501 Probability & Statistics for Systems Engineering (In-person), FA18	*(12/12) 5.00/5.00*
SYS 611 Simulation & Modeling (In-person), FA18	*(27/29) 4.96/5.00*
SYS 611 Simulation & Modeling (Online), FA18	*(22/27) 4.91/5.00*
SYS 601 Probability & Statistics for Systems Engineering (In-person), SP18	*(13/15) 4.92/5.00*
SYS 601 Probability & Statistics for Systems Engineering (In-person), FA17	*(12/12) 4.90/5.00*
SYS 611 Simulation & Modeling (In-person), FA17	*(30/33) 4.96/5.00*
SYS 611 Simulation & Modeling (Online), FA17	*(21/25) 4.86/5.00*
SYS 601 Probability & Statistics for Systems Engineering (In-person), SP17	*(7/8) 4.86/5.00*
SYS 611 Simulation & Modeling (In-person), FA16	*(27/28) 4.96/5.00*
SYS 611 Simulation & Modeling (Online), FA16	*(8/12) 4.88/5.00*

Professional Service

Current Society Membership	*Dates Active*
Senior Member, *American Institute of Aeronautics and Astronautics (AIAA)*	*Aug. 2005–Present*
Senior Member, *IEEE (formerly Institute of Electrical and Electronics Engineers)*	*Mar. 2012–Present*
Member, *American Society of Mechanical Engineers (ASME)*	*Jul. 2016–Present*

Member, *Engineering Society of Systems Scholars (ESSyS)* — *Aug. 2025–Present*

Society Service and Leadership	*Dates Active*
Associate Editor, *INCOSE Systems Engineering Journal*	*Apr. 2023–Present*
President, Co-founding Director, *Engineering Society of Systems Scholars (ESSyS)*	*Aug. 2025–Present*
Chair, *ASME Design Theory and Methodology Technical Committee*	*Oct. 2023–Sep. 2024*
Chair, *AIAA Space Logistics Technical Committee*	*May 2024–Apr. 2026*
Secretary/Vice Chair/Chair, *Council of Engineering Systems Universities (CESUN)*	*Jun. 2021–Aug. 2025*

External Review and Panel Service (Selected)	*Dates Active*
Panelist, *National Science Foundation*	*2017-Present*
Panelist, *National Aeronautics and Space Administration*	*2021-Present*
Product Support Group Member, *SISO Space FOM Standard*	*Aug. 2020–Aug. 2022*
Ballot Group Member, *SISO Space FOM Standard*	*Mar. 2019–May 2019*

Conference Service (Selected)	*Dates Active*
Member, Tech. Program Committee, *CESUN Symposium*	*Jun. 2023*
Review Coordinator, *ASME IDETC (Design Theory and Methodology)*	*Mar. 2018–2023*
Member, Scientific Committee, *IEEE/GRSS IGARSS*	*Feb. 2020–2023*

Department, School, and University Service (Selected)	*Dates Active*
Member, *ASU Industrial Engineering Graduate Program Committee (GPC)*	*Aug. 2023–Present*

Volunteer and Outreach Service (Selected)	*Dates Active*
Adjunct Instructor, *Stevens Pre-college Programs, Hoboken, NJ*	*Summers 2018–2023*
Instructor (Volunteer), *Art Harper Saturday Academy, Hoboken, NJ*	*Oct. 2021–Apr. 2022*
After Hours Education Host (Volunteer), *Adler Planetarium, Chicago, IL*	*Sep. 2014–Dec. 2015*

Supervision

Summary: 15 doctoral students (9 completed; 6 in progress); 21 master's students; 5 postdoctoral scholars.

Doctoral Students (†: at Stevens Institute of Technology; ‡: at Arizona State University)

1. Abbas (Etan) Ehsanfar†, "Allocative Mechanisms and Information Exchange in Task Processing and Interactive Networks," Ph.D. Systems Engineering, Dec. 2018. (Chair P. Grogan; Co-advisor: M. Mansouri). Currently Senior Data Scientist at Vanguard.
2. Turki Alelyani†, "Understanding Design Factors in Software Crowdsourcing," Ph.D. Software Engineering, Aug. 2019. (Chair: Y. Yang, Co-advisor P. Grogan). Currently Assistant Professor at Najran University (Saudi Arabia).
3. Rodrigo Caporali de Andrade†, "Data-driven Operations Management in Multichannel Customer Support Systems," Ph.D. Engineering Management, Aug. 2020. (Chair: S. Moazeni, Co-advisor P. Grogan). Currently Senior Quantitative Risk Analyst at Bunge.
4. Joana I. Lacerda da Fonesca Pinto Cardoso†, "Understanding Interoperability in the Co-design of Cyber-Physical Systems: A Causal Graph-based Method," Ph.D. Systems Engineering, May 2021. (Chair: P. Grogan, Supervisor: M. Pennock). Currently Research Scientist at Massachusetts Institute of Technology.
5. Ambrosio Valencia-Romero†, "Strategy Dynamics in Collective Systems Design," Ph.D. Systems Engineering, Aug. 2021. (Chair: P. Grogan). Currently Assistant Professor at Old Dominion University.
6. Jordan Stern†, "Strategically Robust System-of-Systems Design," Ph.D. Systems Engineering, May 2022 (Chair: P. Grogan). Currently Assistant Professor at Air Force Institute of Technology. **(School of Systems and Enterprises 2022 Fabrycky-Blanchard Award)**
7. Alkım Avşar†, "Intervention in Collaborative System Design to Increase Efficiency by Focusing on Social Factors," Ph.D. Systems Engineering, Aug. 2023. (Chair: P. Grogan). Currently Assistant Professor at Virginia Tech.
8. I. Josue Tapia Tamayo†, "A Conceptual Mission Engineering Framework for Evaluating the Performance of Precipitation Observing Missions," Ph.D. Systems Engineering, Aug. 2023. (Chair: P. Grogan). Decision Scientist at Johns Hopkins University Applied Physics Laboratory.
9. Peizhu (Alex) Zhang†, "Assessment of Systems Engineering Competencies using Simulations and Automated Tools," Ph.D. Systems Engineering, Aug. 2023. (Chair: P. Grogan, Supervisor: J. Wade).
10. Naeun Kim‡, Ph.D. Mechanical Engineering. Expected

May 2027. (Supervisor: P. Grogan, Co-Chair: S. Berman).

11. Hadis Banafsheh‡, Ph.D. Industrial Engineering. Expected May 2028. (Chair: P. Grogan).
12. Mobin Zarreh‡, Ph.D. Industrial Engineering. Expected Dec. 2028. (Chair: P. Grogan).
13. Negin Esmaeili‡, Ph.D. Data Science, Analytics, and Engineering. Expected Dec. 2028. (Chair: P. Grogan).
14. Divya Ramachandran‡, Ph.D. Industrial Engineering. Expected May 2029. (Chair: P. Grogan).
15. Yunzhang Hou‡, Ph.D. Industrial Engineering. Expected May 2029. (Chair: P. Grogan).

Master's Thesis Students (†: at Stevens Institute of Technology; ‡: at Arizona State University)

1. Henry Lee†, "Measuring the Strategic Risk of Collaboration for Satellite Programs, A Case Study on the National Polar-orbiting Satellite System," M.E. Systems Engineering, Dec. 2018. **(SSE 2019 Best Master's Thesis Award)**
2. Alkım Avşar†, "Effects of Personality on Performance in Parameter Design Tasks," M.E. Engineering Management, May 2019.
3. Iser Pena†, "Improving Satellite-based Convective Storm Observations: An Operational Policy Based on Static Historical Data," M.E. Space Systems Engineering, May 2023.
4. Benjamin Stanley†, "An Economic Model for the Development and Implementation of Resource Management Technologies in Human Space Settlement Analogs," M.E. Space Systems Engineering, Aug. 2023.

Master's Project Students (†: at Stevens Institute of Technology; ‡: at Arizona State University)

1. Sigfried Hache†, "A Taxonomy of Spacecraft Mission Architectures," M.E. Space Systems Engineering, May 2017.
2. Alex Sabella†, "A Querying System to Extract System Model Data," M.E. Systems Engineering, May 2017.
3. Dillon Uzar†, "A Framework for MBSE Alternative Architecture Management," M.E. Systems Engineering, May 2017.
4. Stephen Bosomworth†, "Effects of Staged Deployment on the Economics of Global Broadband Internet Satellite Constellations," M.E. Systems Engineering, May 2019.
5. Cian Cavooris†, "Modeling the Development and Evolution of Federated Space Systems," M.E. Space Systems Engineering, May 2019.
6. Sharuk Senthil Kumar†, "Active Debris Removal Technology using CubeSat for Mega Constellation Satellites," M.E. Space Systems Engineering, Dec. 2019.
7. James Laughland†, "Analyzing the Calibration and Validation Support Architecture for CYGNSS as a Design Problem," M.E. Space Systems Engineering, Dec. 2019.
8. I. Josue Tapia Tamayo†, "Analysis of Satellite Radio Occultation Architecture and its Stakeholders," M.E. Space Systems Engineering, Dec. 2019.
9. Brian Brown-Martey†, "Multi-year Budget Modeling for Distributed Spacecraft Missions," M.E. Systems Engineering, Dec. 2019.
10. Mark Spence†, "Logistics Modeling and Simulation of a 50 Day Lunar Excursion," M.E. Systems Engineering, May 2020.
11. Nicholas Spataro†, "Validating the Tradespace Analysis Tool for Constellations (TAT-C) for a FireSat Design Study," M.E. Space Systems Engineering, Dec. 2021.
12. Nathan Tahbaz†, "A Supply-based Model for Logistics and Supply of the International Space Station," M.E. Space Systems Engineering, Dec. 2021.
13. Isaac Feldman†, "Multi-actor Tradespace Exploration Methods for Collaborative Space Systems," M.E. Space Systems Engineering, May 2022.
14. Anam Bayazid†, "Snow Observing Using Optical Sensor and Synthetic Aperture Radar (SAR)," M.E. Space Systems Engineering, May 2023.
15. Ankith Dinakar Veena†, "Precipitation Classification Model for Earth Observation," M.E. Space Systems Engineering, May 2023.
16. Alex S. Yucra Castaneda†, "Ground Station Availability Model for Earth-Observing Missions," M.E. Space Systems Engineering, May 2023.
17. Ryan Schaefer†, "Collaborative Constellation Trade-space Analysis for Wildfire Observing Missions," M.E. Space Systems Engineering, Aug. 2023.

Postdoctoral Scholars (†: at Stevens Institute of Technology; ‡: at Arizona State University)

1. Joseph Thekinen†, Postdoctoral Research Associate, Jan. 2019–Jan. 2020. Ph.D. Mechanical Engineering, Purdue University, Dec. 2018. Currently Assistant Professor at University of Calgary, Canada.
2. Matthew LeVine†, Postdoctoral Research Associate, Jun. 2021–Aug. 2023. Ph.D. Aerospace Engineering, Georgia Institute of Technology, Dec. 2015. Currently Course Facilitator at eCornell.
3. Brian Chell†, Postdoctoral Research Associate, Jun. 2021–Aug. 2023. Ph.D. Systems Engineering, Stevens Institute of Technology, May 2021. Currently General Engineer at National Oceanographic and Atmospheric Administration.
4. Alkım Avşar‡, Postdoctoral Research Scholar, Dec. 2023–Aug. 2025. Ph.D. Systems Engineering, Stevens Institute of Technology, Aug. 2023. Currently Assistant Professor at Virginia Tech.
5. I. Josue Tapia Tamayo‡, Postdoctoral Research

Scholar, Jan. 2024–Mar. 2025. Ph.D. Systems Engineering, Stevens Institute of Technology, Aug. 2023. Currently Decision Scientist at Johns Hopkins University Applied Physics Laboratory.

Honors, Awards, & Fellowships

2024-25 A. Alan B. Pritsker Teaching Excellence Award, *Ira A. Fulton Schools of Engineering, Arizona State University*	*Feb. 2026*
Fall 2024 Outstanding Mentor, *Fulton Undergraduate Research Initiative (FURI), Arizona State University*	*Nov. 2024*
2022 Reviewers of the Year, *ASME Journal of Computing and Information Science in Engineering*	*Feb. 2023*
2022 Early Career Award for Research Excellence, *Stevens Institute of Technology*	*May 2022*
2nd Place Defense Data Grand Prix, Heat 1, *Acquisition Innovation Research Center (AIRC)*	*Feb. 2022*
2020 Reviewer of the Year, *INCOSE Systems Engineering Journal*	*Jul. 2021*
2020-21 "Excellence In All We Do" Employee Excellence Award, *Stevens Institute of Technology*	*Apr. 2021*
2019 Reviewer of the Year, *INCOSE Systems Engineering Journal*	*Oct. 2020*
CAREER Award, *U.S. National Science Foundation*	*Feb. 2020*
2014 Daniel and Eva Roos Engineering Systems Dissertation Prize, *Institute for Data, Systems & Society, Massachusetts Institute of Technology*	*Sep. 2017*
2015 Outstanding Reviewer, *American Society of Civil Engineering (ASCE)*	*May 2016*
2016 Best Paper, *SCS SpringSim Annual Simulation Symposium (ANSS)*	*Apr. 2016*
Japan Study Scholarship, *Japan Student Services Organization*	*Aug. 2013*
National Defense Science and Engineering Graduate (NDSEG) Fellowship, *U.S. Department of Defense*	*Aug. 2010*
Boeing Company Scholarship, *College of Engineering, University of Wisconsin–Madison*	*Sep. 2007*
3rd Place Tong Prototype Competition, *College of Engineering, University of Wisconsin–Madison*	*Feb. 2007*
3rd Place Schoofs Creativity Competition, *College of Engineering, University of Wisconsin–Madison*	*Feb. 2007*
Wisconsin Space Grant Consortium Undergraduate Scholarship, *University of Wisconsin–Madison*	*Apr. 2007*
Gilbert and Genevieve Buske Scholarship, *College of Engineering, University of Wisconsin–Madison*	*Sep. 2006*
Wisconsin Space Grant Consortium Undergraduate Scholarship, *University of Wisconsin–Madison*	*Apr. 2006*
Engineering Physics Undergraduate Scholarship, *University of Wisconsin–Madison*	*Sep. 2005*
Robert C. Byrd Honors Scholarship, *U.S. Department of Education*	*May 2003*
All-State Scholar, *State of Wisconsin*	*May 2003*

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