

Yi GAO, Ph.D.

Education

- Doctor of Philosophy of (PhD), 2010
 - Technology
 - Purdue University, West Lafayette, Indiana, USA
- Master of Science (MSc), 2006
 - Transportation Planning and Management
 - Civil Aviation University of China, Tianjin, China
- Bachelor of Engineering (BE), 2003
 - Traffic and Transportation
 - Civil Aviation University of China, Tianjin, China

Employment History

- Purdue University – United States
 - Associate Professor (with tenure) August 2022 – Present
 - Associate Professor (w/o tenure) August 2018 – May 2022
- Swinburne University of Technology - Australia
 - Senior Lecturer January 2016 – July 2018
 - Lecturer January 2011 – December 2015

Key Academic & Professional Appointments

- Purdue University – USA
 - University Senator (Elected), 2024 – Present
 - Chair, Graduate Education Committee (SATT), 2021 – Present
- University Aviation Association – USA
 - Educator Trustee (Elected), 2024 – Present
 - Chair, Publication Committee, 2021 – 2023
- Transportation Research Board – USA
 - Standing Committee on Airport Landside Operations & Planning (AV013), 2025 – 2028
 - Standing Committee on Airport Terminals & Ground Access (AV050), 2022 – 2025
- Passenger Loyalty Summit – China
 - Chair, 2018 & 2019
- Swinburne University of Technology – Australia
 - Aviation Course Director, 2015 – 2018

Awards

- President's Award, University Aviation Association, 2022
- Teaching Leadership Award, Purdue University, 2022
- Bilsland Dissertation Fellow, Purdue University, 2009 - 2010
- Frederick N. Andrews Fellow, Purdue University, 2006 -2009

Licenses, Registrations, Certifications

- IATA Airline Revenue Management Certificate, 2020
- Private Pilot Certificate, Federal Aviation Administration, 2009

SECTION I: DISCOVERY & RESEARCH

Referred Journal Publications

Wang, S., Dou, Z., Liu, J., & **Gao, Y.** (2025). The fate of Akron-Canton Regional Airport following the dehubbing of Cleveland Hopkins International Airport and exodus of Southwest Airlines. *Case Studies on Transport Policy*, 101497. <https://doi.org/10.1016/j.cstp.2025.101497>

Wang, S., Kong, N. N., Bilotkach, V., Karanki, F., & **Gao, Y.** (2025). What drives the dynamics of airport parking revenues? A panel study of U.S. airports. *Research in Transportation Business & Management*, 61, 101390. <https://doi.org/10.1016/j.rtbm.2025.101390>

Liu, J., Wang, S., Dou, Z., Oluwumi, T. O., & **Gao, Y.** (2025). Fostering active learning through AI-integrated platforms: Student perceptions from a large enrollment professional education course. *Collegiate Aviation Review International*, 43(2), 69-99. Retrieved from <https://ojs.library.okstate.edu/osu/index.php/CARI/article/view/10322/9131>

Chrysogelos, N., Bakun, L., Nguyen, A., Baerson, D., Lu, C-T., & **Gao, Y.** (2025). Bridging the gap: Evaluating skill alignment between collegiate aviation management programs and industry needs. *Collegiate Aviation Review International*, 43(1), 36-64. Retrieved from <https://ojs.library.okstate.edu/osu/index.php/CARI/article/view/10106/9000>

Dou, Z., Bilotkach, V., & **Gao, Y.** (2024). Flight passes do stimulate consumers' spending: A case study of China Eastern Airlines' "Wild Your Weekends." *Journal of Air Transport Management*, 119. <https://doi.org/10.1016/j.jairtraman.2024.102635>

Dou, Z., Keller, J., & **Gao, Y.** (2024). Navigating Massive Text Reports: An Automated Approach to Aviation Safety Reporting System Safety Event Detection. *Transportation Research Record*, 0(0). <https://doi.org/10.1177/03611981241252796>

Karanki, F., Volodymyr, B., **Gao, Y.**, & Lu, C. T. (2024). The economic impact of E-commerce on the U.S. airports: Cost savings and productivity growth. *Journal of Air Transport Management*, 118, 102598. <https://doi.org/10.1016/j.jairtraman.2024.102598>

Liu, J., Beck, C. S., & **Gao, Y.** (2024). Can you judge a book by its cover? An analysis of travelers' perceptions of airline logos and airlines' business models. *Journal of Air Transport Management*, 115, 102543. <https://doi.org/10.1016/j.jairtraman.2024.102543>

Wang, S., Kong, N., & **Gao, Y.** (2024). Use mobile location data to infer airport catchment areas and calibrate Huff gravity model in the New York metropolitan area. *Journal of Transport Geography*, 114, 103790. <https://doi.org/10.1016/j.jtrangeo.2023.103790>

Wang, S., Zheng, Y., & **Gao, Y.** (2023). Airport Ground Access Choice Between Transportation Network Companies and Parking: A Case Study of Hartsfield-Jackson Atlanta International Airport. *International Journal of Aviation, Aeronautics, and Aerospace*, 10(4). DOI: <https://doi.org/10.58940/2374-6793.1857>

Wu, S., & **Gao, Y.** (2023). Machine Learning Approach to Analyze the Sentiment of Airline Passengers' Tweets. *Transportation Research Record*, 2678(2), 48-56. <https://doi.org/10.1177/03611981231172948>

Gao, Y. (2022). Benchmarking the recovery of air travel demands for US airports during the COVID-19 Pandemic. *Transportation Research Interdisciplinary Perspectives*, 13, 100570. <https://doi.org/10.1016/j.trip.2022.100570>

Wang, S. & **Gao, Y.** (2021). A literature review and citation analyses of air travel demand studies published between 2010 and 2020. *Journal of Air Transport Management*, 97, 102135. <https://doi.org/10.1016/j.jairtraman.2021.102135>

Gao, Y., Hao, Y., Wang, S., & Wu, H. (2021). The dynamics between voluntary safety reporting and commercial aviation accidents. *Safety Science*, 141, 105351. <https://doi.org/10.1016/j.ssci.2021.105351>

Gao, Y. (2021). What is the busiest time at an airport? Clustering U.S. hub airports based on passenger movements. *Journal of Transport Geography*, 90, 102931. <https://doi.org/10.1016/j.jtrangeo.2020.102931>

Gao, Y., Sobieralski J. B. (2021). Spatial and operational factors behind passenger yield of U.S. nonhub primary airports. *Journal of Air Transport Management*, 90, 101967. <https://doi.org/10.1016/j.jairtraman.2020.101967>

Gao, Y. (2020). Estimating the sensitivity of small airport catchments to competition from larger airports: A case study in Indiana. *Journal of Transport Geography*, 82, 102628. <https://doi.org/10.1016/j.jtrangeo.2019.102628>

Gao, Y. (2020). A conceptual framework for valuating airline frequent flyer program miles. *International Journal of Aviation, Aeronautics, and Aerospace*, 7(1). Retrieved from <https://commons.erau.edu/ijaaa/vol7/iss1/11>

Gao, Y., & Choy, N. W. (2019). Brand awareness, purchase intention and price premium of international airlines operating between Australia and the United Kingdom. *International Journal of Aviation, Aeronautics, and Aerospace*, 6(3). Retrieved from <https://doi.org/10.15394/ijaaa.2019.1345>

John H. Mott, Sarah M. Hubbard, Chien-Tsung Lu, Joseph B. Sobieralski, **Yi Gao**, Michael S. Nolan, Bhavana Kotla. (2019). Competency-based education: A framework for aviation management programs. *Collegiate Aviation Review International*, 37 (1), Retrieved from <http://dx.doi.org/10.22488/okstate.19.100211>

Gao, Y., Carrigg, M., Lewinski, R., Polderman, D., & Tkalcevic, P. (2018). The perceived value of frequent flyer program benefits among Australian travelers. *International Journal of Aviation, Aeronautics, and Aerospace*, 5(3). Retrieved from <https://doi.org/10.15394/ijaaa.2018.1249>

Gao, Y. & Rajendran, N. (2017) "Safety Climate of Ab-Initio Flying Training Organizations: The Case of an Australian Tertiary (Collegiate) Aviation Program," *Journal of Aviation Technology and Engineering*: Vol. 7: Iss. 1, Article 6. <https://doi.org/10.7771/2159-6670.1162>

Gao, Y., & Kong, S. (2016). Personality types of pilot students: A study of an Australian collegiate aviation program. *International Journal of Aviation, Aeronautics, and Aerospace*, 3(3). <http://dx.doi.org/10.15394/ijaaa.2016.1130>

Gao, Y., Bruce, P. J., & Rajendran, N. (2015). Safety climate of a commercial airline: A cross-sectional comparison of four occupational groups, *Journal of Air Transport Management*, 47, 162-171, <http://dx.doi.org/10.1016/j.jairtraman.2015.05.010>.

Gao, Y., Koo, T. T.R. (2014). Flying Australia–Europe via China: A qualitative analysis of the factors affecting travelers' choice of Chinese carriers using online comments data. *Journal of Air Transport Management*, 39, 23-29, <http://dx.doi.org/10.1016/j.jairtraman.2014.03.006>.

Chandra, S., Chitgopeker, C. K., Crawford, B., Dwyer, J., and **Gao, Y.** (2014) Establishing a Benchmark of Fuel Efficiency for Commercial Airline Operations, *Journal of Aviation Technology and Engineering*: 4 (1), <http://dx.doi.org/10.7771/2159-6670.1097>

Gao, Y., Bruce, P. J., Newman, D. G., Zhang, C. B. (2013). Safety climate of commercial pilots: The effect of pilot ranks and employment experiences. *Journal of Air Transport Management*, 30, 17-24.

Gao, Y., Au, K. T. S., Kwon, H. J., & Leong, E. W. (2013). Learning styles of Australian aviation students: An assessment of the impact of culture. *Collegiate Aviation Review*, 31(1), 17-26. <https://doi.org/10.22488/okstate.18.100435>

Fanjoy, R., & **Gao, Y.** (2011). Learning styles of Chinese aviation students. *International Journal of Applied Aviation Studies*, 11(1), 57-66.

Fanjoy, R., & **Gao, Y.** (2007). Collegiate aviation in China: Opportunities and challenges. *The Journal of Aviation/Aerospace Education & Research*, 17(1), 11-18.

Gao, Y., & Nie, R. (2005). The analysis of single airport holding problem with the dynamic sorting algorithm. *Journal of Civil Aviation University of China*, 23(1), 19-23.

Peer-Reviewed Conference Proceedings, Presentations & Other Publications

Gao, Y. (2025). Robust Modeling of Discrepancies between Scheduled and Actual Flight Block Times. Paper presented on the *Transportation Research Symposium (TRS)*. Rotterdam, The Netherlands

Wang, S., Karanki, F., Dou, Z., & **Gao, Y.** (2025). The Economic Role of Low-Cost Carriers and Ultra-Low-Cost Carriers in Non-Aeronautical Revenue Dynamics. Paper presented on the 2025 *Transportation Research Board (TRB) Annual Meeting*. Washington, DC.

Gao, Y. (2024). Cooperating with Airports at the Loyalty Level as Next Frontier in Revenue Generation. Paper presented on the *2024 Loyalty & Awards Conference*. Bangkok, Thailand.

Liu, J., Kong, N., & **Gao, Y.** (2024). The Role of Airport Expansions in Urban Growth: The Impact Of New Terminals on Local Land Use. Poster presented on the *2024 AGX/SWAAG Joint Annual Conference*, San Marcos, TX.

Dou, Z., Wang, S. & **Gao, Y.** (2024). Investigating Temporal Relationships Among US Commercial Airports with Similar Commercial Flight Delay Patterns. Paper presented on the *27th Air Transport Research Society Conference*. Lisbon, Portugal.

Gao, Y. & Liu, J. (2024). Navigating the Skies of Airline Customer Loyalty: A Comprehensive Review of Airline Frequent Flyer Program Studies. Paper presented on the *27th Air Transport Research Society Conference*. Lisbon, Portugal.

Wang, S., Dou, Z., Oluwumi, T., Liu, J. & **Gao, Y.** (2024). The Domino Effect of Airport Dehubbing: A case study of Cleveland Hopkins International Airport and Akron Canton Airport. Paper presented on the *27th Air Transport Research Society Conference*. Lisbon, Portugal.

Wang, S. & **Gao, Y.** (2024). Determinants of Airport Parking Revenues: An Econometric Analysis (ACRP Graduate Research Award). Paper presented on the *2024 Transportation Research Board (TRB) Annual Meeting*. Washington, DC.

Dou, Z. & **Gao, Y.** (2024). Flight Passes Do Stimulate Consumers' Spending: A Case study of China Eastern Airlines' "Wild Your Weekends". Poster presented on the *2024 Transportation Research Board (TRB) Annual Meeting*. Washington, DC.

Karanki, F., Bilokach, V., **Gao, Y.** & Lu, C. T. (2024). The Economic Impact of E-Commerce on U.S. Airports: Cost Savings and Productivity Growth. Paper presented on the *2024 Transportation Research Board (TRB) Annual Meeting*. Washington, DC.

Gao, Y. & Lu, C.T. (2023). Review and Revamp Aviation Management as a Discipline. Workshop presented on the *2023 UAA Annual Collegiate Aviation Conference & Expo*. St. Petersburg, FL.

Patankar, M., Henneberry, D., Karanki, F., **Gao, Y.** & Wang, P. H. (2023), Competency-based Assessment. Workshop presented on the *AABI International Annual Meeting 2023*. Indianapolis, IN.

Gao, Y. & Wang, S. (2023). Fly net zero by 2050: Does the airline industry forget the trips from home to airports? *Curiosity: Interdisciplinary Journal of Research and Innovation*.
<https://doi.org/10.36898/001c.84857>

Gao, Y. (2023). Mapping Airport Catchment Areas: A Multidimensional Approach. Study presented on the *11th National Aviation System Planning Symposium*. Irvine, CA.

Wang, S. & **Gao, Y.** (2023). How Does Mobile Location of Airport Passengers Tell and Predict Airport Catchment Areas: A Case Study of the New York Metropolitan Multi Airport Region. Poster presented on the *11th National Aviation System Planning Symposium*. Irvine, CA.

Wu, S. & **Gao, Y.** (2023). Happy or Grumpy? A Machine Learning Approach to Analyze the Sentiment of Airline Passengers' Tweets. Poster presented on the *2023 Transportation Research Board (TRB) Annual Meeting*. Washington DC.

Wang, S., Zheng, Y. & **Gao, Y.** (2023). Airport Ground Access Choice Between Transportation Network Companies and Parking: A Case Study of Hartsfield-Jackson Atlanta International Airport. Poster presented on the *2023 Transportation Research Board (TRB) Annual Meeting*. Washington DC.

Wang, S., Kong, N. & **Gao, Y.** (2022). The Use of mobility data in estimating airport catchment areas: A case study of a multiple airport region in Texas. Poster presented on the *2022 Applied Geography Conference (AGX)*.

Keller, J., Mendonca, F., Spence, T., Asunda, P. & **Gao, Y.** (2022). Development and evaluation of an online fatigue training course for collegiate aviation pilots. Paper presented on the *National Training Aircraft Symposium (NTAS) 2022*. Daytona Beach, FL.

Gao, Y., Liu, J., & Wang, S. (2022). Visualize Your Research Work. Workshop presented on the *2022 UAA Annual Collegiate Aviation Conference & Expo*. Colorado Springs, CO.

Liu, J., Beck, C. & **Gao, Y.** (2022). Passengers' Perceptions of Airlines' Logo Design and Their Business Models. Paper presented on the *25th Air Transport Research Society Conference (Hybrid)*. Antwerp, Belgium.

Wang, S. & **Gao, Y.** (2021). Can COVID-19 Data Be Used to Guide Airline Stock Trading During the Pandemic? Paper presented on the *24th Air Transport Research Society Conference*. Sydney, Australia.

Gao, Y. (2019). Precision Mapping Airport Catchment Area. Paper presented on the *Passenger Loyalty China Summit 2019 (PLCS2019)*. Shanghai, China.

Gao, Y. (2018). The possibility of transforming the loyalty arm of Airlines into a data company. Paper presented on the *Passenger Loyalty China Summit 2018 (PLCS2018)*. Shanghai, China.

Gao, Y. & Kuang, J. (2018). Understanding social media in China. the *10th Annual Loyalty Conference (Loyalty2018)*. Bangkok, Thailand

Gao, Y. (2017). Are frequent flyer programs still loyalty programs for frequent flyers? Paper presented on the *Passenger Loyalty China Summit 2017 (PLCS2017)*. Shanghai, China.

Gao, Y. & Lewinski, R.. (2017) The value of frequent flyer programmes: The gap between wishful thinking and reality. Paper presented on the *9th Annual Loyalty Conference (Loyalty2017)*. London, UK.

Chen, Y., Nguyen, K., Brincat, R., & **Gao, Y.** (2015). A comparison of the value of frequent flyer points/miles from the perspective of Australia travellers. *Proceedings of the 2015 World Conference of Air Transport Research Society (ATRS)*. Singapore.

Winter, S., **Gao, Y.**, Rudari, L., & Sperlak, L. (2014). Fostering diversity in collegiate aviation programs:

Overcoming challenges and leveraging existing resources. Paper presented on the *2014 Fall Educational Conference of the University Aviation Association*. Daytona Beach, Florida.

Gao, Y., & Wei, D. (2014) An Operational-Safety Oriented Optimization of Airport Gate Assignment. Paper presented on the 20th Conference of the International Federation of Operational Research Societies (IFORS2014). Barcelona, Spain.

Gao, Y., KOO, T. T. R., & Qin, R. (2014). Fly from Australia to Europe via China? A qualitative analysis of Australian travelers' choice of Chinese carriers on the Australia-Europe route. *Proceedings of the 2014 World Conference of Air Transport Research Society (ATRS)*. Bordeaux, France.

Chandra, S., Chetan, K. C., Crawford, B., Dwyer, J., & **Gao, Y.** (2014). Establishing a benchmark of fuel efficiency for commercial airline operations. *Proceedings of the 2014 World Conference of Air Transport Research Society (ATRS)*. Bordeaux, France.

Gao, Y. & Cui, Y. (2013, July). *Forecasting manpower demand for airport ground service staff: A simulation approach*. Paper presented at the 26th European Conference on Operational Research (EURO2013), Rome, Italy.

Gao, Y., Bruce, P. J., Newman, D. G., & Rajendran, N. (2013, June). Safety climate of crew members: A cross-sectional investigation of flight crew and cabin crew. *Proceedings of the 2013 World Conference of Air Transport Research Society (ATRS)*. Bergamo, Italy.

Bruce, P. J., **Gao, Y.**, Newman, D. G., & Rajendran, N. (2013, June). A comparative study of flight crews' attitudes toward the safety climate of a commercial airline from 2011 to 2012. *Proceedings of the 2013 World Conference of Air Transport Research Society (ATRS)*. Bergamo, Italy.

Gao, Y. & Wei, D. (2012, June). A quantitative assessment of the impact of flight delays on the scheduling of airport ground service staff. *Proceedings of the 2012 World Conference of Air Transport Research Society (ATRS)*. Tainan, Taiwan.

Bruce, P., **Gao, Y.**, Newman, D. G., & Zhang, C. B. (2012, June). A study of the safety climate of the flight crew of a commercial airline. *Proceedings of the 2012 World Conference of Air Transport Research Society (ATRS)*. Tainan, Taiwan.

Gao, Y., Zhang, C. B., & Bruce, P. (2012, June). An analysis of the competitiveness of high-speed-rail in the Beijing-Shanghai market. *Proceedings of the 2012 World Automation Congress (WAC)*. Puerto Vallarta, Mexico.

Gao, Y. (2011, July). *A robust optimization approach to the optimization of airline employee scheduling*. Paper presented at the 19th Triennial Conference of the International Federation of Operational Research Societies (IFORS2011), Melbourne, Australia.

Gao, Y. (2009). *Manpower scheduling of airport ramp service employees*. Virtual poster session presented at the University Aviation Association Fall Education Conference, Wichita, Kansas, USA.

Gao, Y., & Nie, R. (2005). Air traffic conflict detection and resolution model based on geometric algorithm. In Z. Yang, X. Yan, & J. Zhang (Ed.), *6th National Youth Conference on Transportation and Communications. China Transportation Research and Exploration* (pp. 429-432). Dalian, China: Dalian Maritime University Press.

Wang, Z., Li, H., & **Gao, Y.** (2003). Optimal algorithm for multi-airport flight queues problem in automatic air traffic flow management. In J. Zhang; X. Yan; W. Wang, & H. Zuo (Ed.) *5th National Youth Conference on Transportation and Communications, Changsha, China. China Transportation Research and Exploration* (pp. 603-607). Beijing, China: China Communications Press.

Books & Edited Books

Bruce, P. J., **Gao, Y.**, & King, J. M. C. (2017). *Airline Operations: A Practical Guide*. United Kingdom: Routledge

Gao, Y. (2026, expected). *Understanding Airline Frequent Flyer Programs – A Comprehensive Analysis*. Under contract with Springer Nature Switzerland AG.

Federal Project Reports

National Academies of Sciences, Engineering, and Medicine. 2023. *Toolkit for Establishing Airport Catchment Areas*. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/27424>.

National Research Council. 2023. *State of Airport Loyalty Programs*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27279>.

Dissertation and Thesis

Gao, Y. (2010). Workforce scheduling of airport ramp service employees under the impact of flight delays. Ph.D. dissertation, Purdue University, United States. Dissertations & Theses: A&I. (Publication No. AAT 3444511).

Gao, Y. (2006). *En-route conflict resolution strategies based on optimal control*. Master of Science Thesis, Civil Aviation University of China, Tianjin, China.
Chinese Outstanding Master Thesis Award

Research Grants & Sponsored Projects

- Purdue University (Total Awards as of September 2025: \$2,762,000 / \$610,000)
 - ACRP 01-59: Guide for Developing and Managing Airport Landside Vehicular Congestion Pricing
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: PI (Lead of the Purdue Team, as a sub-recipient to the primary consultant)
 - Expected Date: October 2025 – February 2027
 - Total Award Amount: \$400,000.00
 - Investigator's Award Amount: \$25,000.00
 - ACRP 03-80: A Guide for Air Cargo System Planning
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: co-PI
 - Expected Date: October 2025 – February 2027
 - Total Award Amount: \$425,000.00
 - Investigator's Award Amount: \$ 40,265.00
 - ACRP 01-55: Guide for In-Terminal Airport Concession Programs
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: PI (Lead of the Purdue Team, as a sub-recipient to the primary consultant)
 - Total Proposal Amount: \$500,000.00
 - Investigator Proposal Amount: \$125,000
 - ACRP 03-74: ACRP Web Resource for Airport User Choice Modeling and Analysis
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: Senior Specialist
 - Total Proposal Amount: \$350,000.00
 - Investigator Proposal Amount: \$30,000
 - ACRP 03-72: A Guide on the Economic Impacts of E-Commerce on Airports and Airport Stakeholders
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: Project Manager/co-PI
 - Total Proposal Amount: \$400,000.00
 - Investigator Proposal Amount: \$60,000
 - Determinants of Airport Parking Revenues: An Econometric Analysis
 - Sponsoring Organization: Virginia Space Grant Consortium
 - Role: Academic Supervisor (Student investigator: Sen Wang)
 - Total Proposal Amount: \$12,000.00
 - ACRP Synthesis 11-03/Topic S01-27: State of Airport Loyalty Programs
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: PI (Lead of the project)
 - Total Proposal Amount: \$45,000.00
 - ACRP 03-62: A Toolkit for Establishing Airport Catchment Areas
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: PI (Lead of the project)
 - Total Proposal Amount: \$300,000.00
 - ACRP 01-41: Airport Blockchain Implementation Guidebook
 - Sponsoring Organization: National Academies of Science, Engineering and Medicine
 - Role: PI (Lead of the Purdue Team, as a sub-recipient to the primary consultant)
 - Total Proposal Amount: \$330,000.00
 - Investigator Proposal Amount: \$73,000.00.

- Swinburne University of Technology (Australia) (Total Awards: A\$168,050)
 - Safety climate analysis: A cross-sectional comparison of four occupations
 - Sponsoring Organization: Virgin Australia (airline)
 - Total Award: A\$81,200
 - Date: 2014-2015
 - Role: PI
 - Safety climate analysis: A longitudinal comparison of flight crew's responses
 - Sponsoring Organization: Virgin Australia (airline)
 - Total Award: A\$66,100
 - Date: 2012-2013
 - Role: PI
 - Safety climate analysis: A study of the flight crew
 - Sponsoring Organization: Virgin Australia (airline)
 - Total Award: A\$20,750
 - Date: 2011-2012
 - Role: co-PI

SECTION II: LEARNING & TEACHING

Major Curriculum Development Achievement

- New Professional Development Certificate Program
 - *ISTAT University*, 2024: Through Dr. Yi Gao's initiative and leadership, Purdue University successfully reached an agreement with the ISTAT Foundation to deliver the prestigious ISTAT University program—a globally recognized professional development certificate in aviation finance and leasing. Dr. Gao played a central role in facilitating this collaboration, which not only brings industry-relevant content and exposure to Purdue students but also positions the university at the forefront of talent development in the aircraft leasing and asset management sector.
- New Degree Program
 - *Graduate Certificate in Aviation Financial Management*, 2021: Dr. Yi Gao, in collaboration with SATT colleagues, led the development of a new graduate certificate program designed to serve both residential and Purdue Online students. Dr. Gao played a pivotal role in shaping the curriculum, which includes three newly developed courses that respond directly to emerging opportunities in the aviation industry, as well as the revitalization of a previously inactive course following the retirement of a senior faculty member. This initiative significantly expands the academic offerings available to current and prospective SATT students and strategically positions Purdue to attract a broader population of professional learners through its online platform.
- New Course
 - AT 54600 Aviation Financial Instruments and Operations (Re-built)
 - AT 54700 Airline Revenue Management (New)
 - AT 54800 Aircraft Asset Management (New)
 - AT 54900 Aircraft Leasing (New)

Doctoral Students Supervision

- Doctor of Philosophy (Ph.D.)
 - Yinxiao Zhang, Committee Chair, degree expected May 2029
 - Jialong Sun, Committee Chair, degree expected May 2029
 - Jiayu Liu, Committee Chair, degree expected May 2027
 - Yen-Chen Huang, Committee Member, degree expected May 2027
 - Zhi Dou, Committee Chair, degree expected May 2026
 - Tolulope Oluwumi, Committee Chair, degree expected May 2026
 - =====
 - Sen Wang, Committee Chair, degree awarded May 2024
 - Currently Assistant Professor at Ohio State University
 - Jiansen Wang, Committee Member, degree awarded August 2024
 - Currently Assistant Professor at University of Houston – Victoria
 - Linfeng Jin, Committee Member, degree awarded August 2021
 - Currently Assistant Professor at Embry-Riddle Aeronautical University
- Doctor of Technology (D. Tech)
 - Michael Ott, Committee Member, degree expected May 2026
 - Stacy Workman-Wyatt, Committee Member, degree expected May 2026
 - Thomas Takaindisa, Committee Member, degree awarded August 2025
- Master of Science (MSc)
 - Jialing Lin, Committee Chair, degree expected December 2025
 - Jialong Sun, Committee Chair, December 2024
 - Zhuofan Li, Committee Chair, May 2024
 - Pradeep Natrajan Kumar, Committee Chair, December 2023
 - David Cargill, Committee Chair, August 2023
 - Anirudh Reddy Jammula, Committee Chair, May 2023
 - Alizabeth Arnett, Committee Chair, May 2023
 - Jiayu Liu, Committee Chair, May 2023.

- Yunhao Zhou, Committee Chair, May 2022.
- Trey Heckaman, Committee Chair, May 2022.
- Jiyang Wang, Committee Chair, May 2022.
- Sen Wang, Committee Chair, 2020.
- Jiaying Mei, Committee Chair, 2020.
- Weikai Ye, Committee Chair, 2020.
- Christine Jeon, Committee Chair, 2020.
- Peter K. Maynard, Capstone Research Project, 2020.
- David L. Magness, Capstone Research Project, 2020.

Courses Delivered

- Purdue University
 - AT10200 – Aviation Business
 - AT33800 – Airline Revenue Management
 - AT41200 – Aviation Finance
 - AT49800 – Aviation Technology Capstone
 - AT54600 – Aviation Financial Instruments and Operations
 - AT54700 – Airline Revenue Management
 - AT54800 – Aircraft Asset Management
- Swinburne University of Technology (Australia)
 - AVA10005 – Aviation Regulation and Operations
 - AVA40004 – Aviation Research Project (Part I)
 - AVA40006 – Aviation Research Project (Part II)

SECTION III: ENGAGEMENT & SERVICE

Journal Editorial & Review Board

- Editor, 2021 – 2023
 - *Collegiate Aviation Review*, published by University Aviation Association
- Member of Editorial Board
 - *International Journal of Aviation Sciences*, published by Florida Institute of Technology
- Publication Reviewer (Sample list)
 - *Collegiate Aviation Review International*
 - *European Transport Research Review*
 - *International Journal of Aviation, Aeronautics, and Aerospace*
 - *Journal of Aviation/Aerospace Education & Research*
 - *Journal of Aviation Technology & Engineering*
 - *Journal of Air Transport Management*
 - *Journal of Modelling in Management*
 - *Journal of Retailing and Consumer Services*
 - *Learning and Individual Differences*
 - *The Aeronautical Journal*
 - *The International Journal of Human Resource Management*
 - *Transportation Letters: The International Journal of Transportation Research*
 - *Transport Reviews*
 - *Transportation Research Part D: Transport and Environment*
 - *Transportmetrica B: Transport Dynamics*
 - *Transportation Research Record: Journal of the Transportation Research Board*

External Research Grant Reviewer

- Natural Sciences and Engineering, Research Council of Canada, 2025
- USDOT Tier-1 UTC Transportation Cybersecurity Center for Advanced Research and Education (CYBER-CARE), 2024 & 2025

Research Project Panelist

- ACRP 10-39: Best Practice Guide for Airport Operational Resilience: Update to ACRP Report 65
 - 2025 – 2026
- ACRP Project 09-23 Strategies for Spatial Data Maintenance at Airports
 - 2024-2025
- ACRP Synthesis Project 11-03/Topic S10-21 Utilizing Airport Automatic Dependent Surveillance-Broadcast (ADS-B) Data
 - 2024-2025
- ACRP Synthesis Project 11-03/Topic S03-18 Communication, Implementation, and Outcomes of Airport Economic Impact Studies
 - 2022-2023

External Educational Program Reviewer

- Embry-Riddle Aeronautical University
 - Master of Science in Aviation (MSA), 2023
 - Aviation Ph.D., 2022
- California State University
 - Bachelor of Science in Aviation Administration, 2022

Media Report

Indiana Public Media, "New Airline Rules Prioritize Passenger Protection", December 20, 2024.
<https://indianapublicmedia.org/news/new-airline-rules-prioritize-passenger-protection.php>

Bloomberg, "Delta, American, United Make It Hard to Best the Rewards Game", December 20, 2024.

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Wall Street Journal, "Delta Loyalty Program Changes Reward Biggest Spenders Most", September 14, 2023. <https://www.wsj.com/business/airlines/delta-loyalty-program-changes-reward-biggest-spenders-most-dcefa85e>

Wall Street Journal, "You're going to have to work harder to keep your airline status", October 12, 2022. <https://www.wsj.com/articles/youre-going-to-have-to-work-harder-to-keep-your-airline-status-11665594202?mod=e2tw>

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IndyStar, "Frontier and Spirit merger: What it means for Indianapolis flyers", February 8, 2022, <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi1spjS5Jb2AhUllkEHcm9Av4QFnoECAwQAO&url=https%3A%2F%2Fwww.indystar.com%2Fstory%2Fnews%2Flocal%2Ftransportation%2F2022%2F02%2F08%2Ffrontier-and-spirit-merger-what-means-indianapolis-flyers%2F6690242001%2F&usg=AOvVaw3u3mPqJkpgbPQK2f0qaJmg>

Texas Monthly, "Why American and Southwest Airlines cancelled thousands of flights", November 4, 2021, https://www.texasmonthly.com/news-politics/american-southwest-airlines-cancellations-pandemic/?_gl=1*yd72vj*_ga*YW1wLU84ank5LU9taHoxEVoXzQ20G1iSUdncl9xcU55bHBFRU9YYUhfMkdzdZdadkFjYIRNN2dnWC1oR0Y0V0NaYlg.#comments

NPR, "Boeing 737 max grounding takes toll on airlines and passengers", 29 July 2019, <https://www.npr.org/2019/07/29/746345317/boeing-737-max-grounding-takes-toll-on-airlines-and-passengers>

WLFI, "Airline ticket prices set to increase as holiday season nears", 23 October 2018, <http://www.wlfi.com/content/news/Airline-ticket-prices-set-to-increase-as-holiday-season-nears-498356601.html>

93.1FM WIBC, "Many factors will play into rising airfares for holiday season and onward", 16 October 2018. <https://www.wibc.com/news/local-news/many-factors-will-play-rising-airfares-holiday-season-and-onward>

The Exponent, "Fuel costs rise, driving up airline ticket prices", 17 October 2018, https://www.purdueexponent.org/city_state/article_c4ae0472-d231-11e8-97f7-27b0ad6387ae.html

The Age, "The sky is no limit for aviation students", 25 July 2015, <http://www.theage.com.au/business/the-sky-is-no-limit-for-aviation-students-20150718-gifhxg>

The National, "Etihad performs a perfect flight", 25 July 2015, <http://www.thenational.ae/uae/technology/etihad-performs-a-perfect-flight#full>

Committee Representation

- Department – School of Aviation and Transportation Technology
 - Chair, Graduate Education Committee. (August 2021 – Present)
 - Representative, Aviation Management, Industrial Advisory Board. (August 2022 – Present)
 - Member, SATT Recruitment. (November 2020 – December 2021).
 - Member, Curriculum Committee. (August 2018 – May 2021).
 - Member, Scholarship Committee. (August 2018 – July 2019).
 - Member, International Programs. (August 2018 – July 2019).
- College – Purdue Polytechnic Institute
 - Member, Graduate Education Committee. (August 2021 – Present)
 - Member, Purdue Polytechnic Institute's Curriculum Committee. (August 2018 – May 2021).
 - Member, Polytechnic Faculty Grievance Committee. (July 1, 2019 – June 30, 2020).
- University – Purdue University
 - Senator (Representative of SATT), Purdue University Senate, (August 2024 – Present)
 - Slate Advisory Council, 2025-2026

Faculty Mentor/Advisor

- Professional Asian Pilot Association (2023-current)
- Kappa Pi Beta (2024-current)

Professional Affiliations

- International Society of Transport Aircraft Trading (ISTAT), 2020 – Present
 - Representative of Purdue University
- The Airline Group of the Int'l Federation of Operational Research Societies, 2012 – Present
 - Member
- University Aviation Association (UAA), 2009 – Present
 - Chair, Publication Committee, 2021 – 2023
 - Board of Trustees, Educator Trustee, 2024 – Present

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