ANANYA SHETH
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Curriculum Vitae

EDUCATION

2021 – 2022	Post-doctoral Research Fellow Stevens Business School - Stevens Institute of Technology, Hoboken, NJ. USA
2016 – 2021	Ph.D. Civil Engineering Concentration: Innovation and Transformational Design Dissertation: Building Pathways to Enterprise Resilience The Institute for Innovation Science Purdue University, IN. USA
2014 – 2016	M.S. Civil Engineering Purdue University, USA GPA: 3.83
2008 – 2012	B.E. Civil Engineering Manipal Institute of Technology, India GPA: 3.50

AWARDS

2021	**NSF dissertation grant (co-PI)**	Awarded by the Decision, Risk, and Management Science, Division of Social and Economic Sciences, National Science Foundation. Grant Title: Doctoral Dissertation Research in DRMS: Building a comprehensive understanding of enterprise risks and their interdependencies for improved risk-intelligence. *https://www.nsf.gov/awardsearch/showAward?AWD_ID=2049782&HistoricalAwards=false*
2021	Business model competition	Burton D. Morgan Business Model Competition, Purdue University Awarded the best social innovation business plan
2019	Travel grant	Purdue University Graduate School. Awarded to support conference travel to Estonia for the 34th EGOS Colloquium
2015	Scholarship	Construction Management Association of America – Chicago
2012	Finalist	Go Green in the City 2012 – A global innovation challenge held annually by Schneider Electric – Paris

PEER-REVIEWED PUBLICATIONS (PUBLISHED OR FORTHCOMING)

2022	Sheth, A. Sinfield, JV.	An analytical framework to compare innovation strategies and identify simple rules. Technovation, 115, 102534. https://doi.org/10.1016/j.technovation.2022.102534

2022 Sheth, A. Kusiak, A. Resiliency of Smart Manufacturing Enterprises via Information Integration. Journal of Industrial Information Integration, 100370. https://doi.org/10.1016/j.jii.2022.100370

2021 Sheth, A. Sinfield, JV. Systematic Problem-specification in Innovation Science using Language. The International Journal of Innovation Science https://doi.org/10.1108/IJIS-03-2020-0019

2020 Sinfield, JV. Sheth, A. Kotian, RR. Framing the Intractable: Comprehensive Success Factors for Grand Challenges. Sustainable Futures 2020, 2. https://doi.org/10.1016/j.sftr.2020.100037

2014 Sheth, A. Goel, A. Pai, BV. Properties of Concrete on Replacement of Coarse Aggregate and Cementitious Materials with Styrofoam and Rice Husk Ash American Journal of Engineering Research 2014, 3(1), 268-271.

PEER-REVIEWED PAPERS (R&R)

2022 Sheth, A. Sinfield, JV. Building Resilient Enterprises MIT Sloan Management Review – round 1 revision

2022 Morkan, B. Bertels, H. Sheth, A. Holahan, P. Managing with Stakeholders: Citizenship Behavior Action Strategies for Mega Project Resilience International Journal of Project Management: Special Issue on Resilience in Project Studies – round 1 revision

PEER-REVIEWED PAPERS (IN-REVIEW)

2022 Bishop, S. DiPaola, M. Koen, P. Sheth, A. Leadership Behaviors Needed to Implement Ambidextrous Organizations within Large Incumbent Firms Harvard Business Review

2022 Sheth, A. Sinfield, JV. Collective leadership in Top Management Teams (TMTs): Individual behaviors and TMT performance Organization Science

2022 Sheth, A. Sinfield, JV. A Taxonomy of Enterprise Risk Events Journal of Business Research

WORKING PAPERS

2022 Sheth A. Koen P. "Where to play?" An Expanded Three-Part Exploration Typology for Large Incumbent Firms Academy of Management Review

2021 Sheth, A. Rayz, J. Sinfield, JV. A Comprehensive View of Corporate Risks: A data-driven approach Undecided

2021 Sheth, A. Shah, R. Sinfield, JV. Variations in firm riskiness and their causes: An industry-firm multi-level analysis Management Science

INVITED TALKS

2021	CASN-RA ASU	A Comprehensive Typology of Complex Supply Chain Risk Networks using a Data Driven Approach – (March 4-5, 2021) Venue: Complex Adaptive Supply Networks – Research Accelerator, Arizona State University *To be co-presented with Prof. Rachna Shah (Carlson School - UMN)*

COMPETITIVE GRANT WRITING

2021	Co-PI on a **fulfilled NSF grant**	Doctoral Dissertation Research Improvement Grant – Decision, Risk, Management Science, Division of Social and Economic Sciences, National Science Foundation. Grant Title: Doctoral Dissertation Research in DRMS: Building a comprehensive understanding of enterprise risks and their interdependencies for improved risk-intelligence. *(**awarded** amount $ 37,975).* *https://www.nsf.gov/awardsearch/showAward?AWD_ID=2049782&HistoricalAwards=false*
2016	Fellowship	Kauffmann Foundation graduate research grant Grant Title: Embracing change: the art of transformation for the intrapreneur. *(not awarded)*

REFEREED CONFERENCE PAPERS

2022	Morkan, B. Bertels, H. Sheth, A. Holahan, P.	Managing with Stakeholders: Citizenship Behavior Action Strategies for Mega Project Resilience Eastern Academy of Management, 2022
2019	Sheth, A., Sinfield, JV.	Simulating Self-Organization during Strategic Change: Implications for Organizational Design. Presented at the ACM – SIGCHI – Collective Intelligence Conference 2019, Carnegie Mellon University – Pittsburgh. arXiv:2007.08521v1
2018	Sheth, A., Sinfield, JV.	Applying 'simple-rules' heuristics to simulate self-organized managerial adaptation to strategic change in three organizational designs. Presented at the 34th European Group for Organizational Studies (EGOS) Colloquium at Tallinn, Estonia
2018	Sheth, A., Sinfield, JV.	Towards proactive organizational change. Paper Development Workshop - Academy of Management (AOM) Chicago
2018	Sheth, A., Sinfield, JV.	The theory of proactive organizational resilience. Paper Development Workshop - Academy of Management Review (AMR) – Haas School of Business, University of California Berkeley
2017	Sheth, A., Sinfield, JV.	Swarm Intelligence and Organizations. Presented at the Society for Industrial and Applied Mathematics (SIAM) – Purdue Chapter

REFREED POSTERS

2020	Sheth, A., Sinfield, JV.	Towards Resilient Organizations- Beginning with a Typology of Risks. Purdue's intramural annual Sigma Xi poster competition
2019	Lin, YC., Lumpkin, D. Sheth, A., Sinfield, JV.	Enabling Innovation in Action. The Civil Engineering Graduate Research Symposium – Purdue University

OTHER PUBLICATIONS

2019	Sheth, A., Sinfield, JV.	Enabling Innovation Insights Report for the Proctor & Gamble Co.
2019	Sheth, A., Sinfield, JV.	Enabling Innovation Implementer's Guide for the Proctor & Gamble Co.
2018	Sheth, A., Sinfield, JV.	Synthesis Study: Overview of Readily Available Culvert Inspection Technologies – Joint Transportation Research Program - The Indiana State Department of Transport (INDOT)

TEACHING AND MENTORING EXPERIENCE

Present	Lecturer	MGT-103: Introduction to Entrepreneurial Thinking at The Stevens Business School, Stevens Institute of Technology. Mandatory course for all first-year engineering students (550+ students). Taught in collaboration with 11 other faculty members.
Present	Mentor	Two Ph.D. candidates at the Institute for Innovation Science (Innovation Science Lab), Purdue University.
Spring 2020	Invited Lecturer	Purdue University class ENGR 490 on Breakthrough Thinking for Complex Challenges. I introduced undergraduate seniors and juniors to Systems Thinking, covering the variety of system, complexity and associated concepts, and their application to the class project. *https://www.youtube.com/watch?v=IDO0272iydM*
2018-2020	Lab coach	Transferred research skills and new methods to the Innovation Science Lab group on a monthly basis as part of our lab's research effectiveness and skill transfer agenda. This often involved teaching methods to students working in parallel areas.
2019-2020	Mentor	Played the role of mentor to one incoming graduate student under the Purdue Civil Engineering peer-mentoring program 2019-2020
2015-2017	Facilitator	A component of my job as program manager for URGlobal was facilitating discussions and hosting training sessions for undergraduate club officers. These trainings encompassed methods to design learning programs, techniques to deliver them and improve student engagement, as well as personality introspection.

SERVICE

2020	Team lead	Purdue Engineering Initiative on Innovation & Making – Aggregation of innovation resources at Purdue University and website design
2016-2018	Co-chair	Professional development committee for the Civil Engineering Graduate Students Advisory Council (CEGSAC) – Purdue University
2017-2020	Reviewer	The Academy of Management (AOM) annual meeting
2018-2020	Reviewer	The International Journal of Systematic Innovation
2020	Reviewer	The International Journal of Innovation Science
2018-2019	Organizer	Research Bytes seminar series, Graduate research symposium series, and Successful Alumni series of the CEGSAC

PROFESSIONAL MEMBERSHIPS

- Academy of Management (AOM)
- European Group on Organizational Studies (EGOS)
- Industry Studies Association (ISA)
- The Society for Decision Making Under Deep Uncertainty (DMDU)
- International Society for Professional Innovation Management (ISPIM)
- Association of Computing Machinery (ACM)
- Institute for Operations Research and the Management Sciences (INFORMS)
- Purdue System Thinkers – Student Chapter of Purdue (INCOSE)
- The Evolution Institute
- The Prosocial Institute

INDUSTRY WORK EXPERIENCE

2014-2016	Assistant Program Manager	Purdue University Residences • Built the UR Global program and Student Club. • Led trainings and conducted leadership workshops for 30+ student volunteers • Organized 30+ events for international undergraduate students' development
2012-2014	Assistant Project Manager	V-Create Architects, India • Delivered two construction projects and played key roles in all phases of the construction life cycle. • Led the operations team to deliver 67,000 sft. of space on time and within budget, maintaining an optimum construction cycle

RELEVANT COURSEWORK

Concept building:

CE 597	Entrepreneurship and business	Gained a foundational understanding of approaches for business opportunity evaluation, testing, and development

	strategy in engineering	
CE 597	Breakthrough thinking for complex challenges	Gained a systematic converge-structure-diverge method to frame and address complex challenges
BME 695	Deep learning	Gained a foundational understanding of deep learning methodologies and an opportunity to apply them for text data
IE 590	Perspectives on systems engineering	Gained a conceptual view of the various flavors of systems and the various approaches to analyze them qualitatively
AAE 560	Systems-of-systems modelling and analysis	Gained a conceptual understanding of multiple-interacting systems, their modeling, and their analysis
MGMT 650	Strategic management I	Gained a foundational understanding of both Business and Corporate Strategy
MGMT 655	Competitive strategy	Gained a foundational understanding of competitive dynamics and competitive strategy

Methodology:

CE 527	Analytical method in design and construction	Learned simulation methods such as agent-based modeling and applied them to the domain of organizations
CE 614	Statistical and econometric methods	Gained a foundational understanding of econometrics and the experience of applying it to the domain of organizations
MGMT 670	Business Analytics	Gained a methodological foundation in formulating and analyzing the business case in corporate companies
MGMT 573	Optimization modelling with spreadsheets	Gained a methodological foundation in applying data-driven techniques for problems related to business operations
IE 590	Nature-inspired computation	Got introduced to computational methods inspired by natural systems that are useful in system optimization and beyond
CNIT 581	Natural language technologies	Gained a foundational understanding of computational linguistics and their application to business systems

Professional development:

ENE 695	Succeeding as an engineering professor	Gained a holistic view of the opportunities, challenges, and professional milestones in the career of a tenure-track Engineering faculty at a R1 university in the USA, and strategies

		to succeed therein. Additionally, gained detailed understanding of writing a successful NSF Career grant.
MGMT 590	Student managed venture fund	Experiential Learning Initiative: Provided an opportunity to lead the due diligence process for a real-life investment opportunity on behalf of the Purdue Venture Fund
MGMT 690	ELI: Corporate consulting	An Experiential Learning Initiative- Gained real-world corporate consulting experience with leading consulting companies

SKILL DEVELOPMENT WORKSHOPS

- Writing Effective Teaching Cases workshop offered by the casecenter.org
- Writing Publishable Papers series offered at the Purdue College of Engineering
- eXtreme Science and Engineering Discovery Environment (XSEDE) workshops on using High Performance Computing resources provided by the XSEDE project

EXTRA-CURRICULAR ACTIVITIES

- Karate – Goju Ryu (7th Kyu)
- Art of Living – Purdue Chapter
- Founding member – TATVAM – Global fusion music band at Purdue
    - Performed 50+ music shows in Indiana and Illinois