|  |  |
| --- | --- |
| **[ANANYA SHETH](http://www.anansheth.com/)** | **Curriculum Vitae** |
| Stevens Institute of Technology |  |
| [asheth5@stevens.edu](mailto:asheth5@stevens.edu); [Github](http://www.github.com/sheth7); [GoogleScholar](https://scholar.google.com/citations?user=DHhwS5wAAAAJ&hl=en&oi=ao); [ResearchGate](https://www.researchgate.net/profile/Ananya_Sheth); [Website](http://www.anansheth.com/) |  |

**EDUCATION**

|  |  |
| --- | --- |
| 2021 – 2022 | Post-doctoral Research Fellow |
|  | The Business School - |
|  | Stevens Institute of Technology, USA |
| 2016 – 2021 | Ph.D. Civil Engineering |
|  | Concentration: Innovation and Transformational Design |
|  | Dissertation: Building Pathways to Enterprise Resilience |
|  | The Innovation Science Lab |
|  | Lyles School of Civil Engineering, Purdue University, 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 |

**GRANT WRITING EXPERIENCE**

|  |  |  |
| --- | --- | --- |
| 2020 | Co-PI on an **active 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*](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)* |

**PEER-REVIEWED PUBLICATIONS (PUBLISHED OR ACCEPTED)**

|  |  |  |
| --- | --- | --- |
| 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 (IN-REVIEW)**

|  |  |  |
| --- | --- | --- |
| 2021 | Sheth, A. Sinfield, JV. | Pathways to Enterprise Resilience  MIT Sloan Management Review – in-review |
| 2021 | 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 – in-review |
| 2021 | Sheth A. Kusiak A. | Resiliency of Smart Manufacturing Enterprises  The Journal of Industrial Information Integration – in-review round 2 |
| 2020 | Sheth, A. Sinfield, JV. | An Analytical Framework to Compare Innovation Strategies and Identify Simple Rules  Technovation – Elsevier – *in-review round 2* |
| 2020 | Sheth, A. Sinfield, JV. | A Taxonomy of Enterprise Risk Events  Journal of Risk Research – in-review |

**WORKING PAPERS**

|  |  |  |
| --- | --- | --- |
| 2021 | Sheth A. Koen P. | Defining and Characterizing Transformational Innovation  Academy of Management Review |
| 2021 | Sheth, A. Rayz, J. Sinfield, JV. | A Comprehensive View of Corporate Risks: A data-driven approach  MIS Quarterly: Management Information Systems |
| 2021 | Sheth, A. Shah, R. Sinfield, JV. | Variations in firm riskiness and their causes: An industry-firm multi-level analysis  Management Science |
| 2021 | Ajmani, A. Sheth, A. Sinfield, JV. | A low-risk path to high-impact innovation in the U.S. Marine Renewable Energy Industry  Marine Technology Society Journal |
| 2020 | Sheth, A. Sinfield, JV. | Swarm Modelling of Collective Leadership in Top Management Teams  The Leadership Quarterly |

**REFEREED CONFERENCE PAPERS**

|  |  |  |
| --- | --- | --- |
| 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](https://arxiv.org/abs/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) |

**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)* |

**AWARDS**

|  |  |  |
| --- | --- | --- |
| 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 |

**TEACHING AND MENTORING EXPERIENCE**

|  |  |  |
| --- | --- | --- |
| 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*](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) * 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 * Advanced Degree Consulting Club at Purdue |

**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 strategy in engineering | Gained a foundational understanding of approaches for business opportunity evaluation, testing, and development |
| 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 |