HYUNWOO PARK

Associate Dean for Academic Affairs, Graduate School of Data Science, Seoul National University 43-505, 1 Gwanak-ro, Gwanak-gu, Seoul 08826, South Korea hyunwoopark@snu.ac.kr | https://hyunwoopark.com | +82-2-880-9779 Last updated: October 2, 2024

EMPLOYMENT

Seoul National University, Seoul, South Korea

- Associate Dean for Academic Affairs, Graduate School of Data Science, 2023 Present
- (Interim) Associate Dean for Student Affairs, Graduate School of Data Science, 9/2023 2/2024
- Associate Professor, Graduate School of Data Science, 2021 Present

The Ohio State University, Columbus, OH, USA

- Assistant Professor in Management Sciences, Fisher College of Business, 2017 2021
- Core Faculty, Translational Data Analytics Institute, 2017 2021

Georgia Institute of Technology, Atlanta, GA, USA

• Postdoctoral Fellow at Tennenbaum Institute, 2015 – 2017

EDUCATION

Georgia Institute of Technology, Atlanta, GA, USA

- Ph.D. in Industrial Engineering (Minor in Economics), 2015
- Dissertation: "Computational Analysis for Technological Innovation in Complex Enterprise Systems"
- Committee:
 - Co-chairs: William B. Rouse, Rahul C. Basole
 - Members: Leon F. McGinnis, Nicoleta Serban, Raul O. Chao (external; UVA Darden)

University of California, Berkeley, CA, USA

• Master of Information Management and Systems (Management of Technology Certificate), 2010

Seoul National University, Seoul, South Korea

• B.S. in Electrical Engineering (summa cum laude), 2008

PUBLICATIONS

(* denotes equal contribution among authors.)

- [30] Choi J, Park Y, Choi Y, Kim S, Lee H, Park H. 2024. Visualization system to identify structurally vulnerable links in OHT railway network in semiconductor FAB using betweenness centrality. <u>PLoS ONE</u>. 19(7): e0307059. [Link ☑]
- [29] Ball GP, Bavafa H, Blanco C, **Park H**, Wowak KD. 2024. Gender and Serious Drug Recalls: A Textual Sentiment Analysis of Drug Reviews on WebMD. *Production and Operations Management*, [Link ☑]
- [28] Basole RC, **Park H**, Seuss CD. 2024. Complex Business Ecosystem Intelligence Using AI-Powered Visual Analytics. *Decision Support Systems*, 178, 114133 [Link ☑]
- [27] Lee J, Jung HJ, **Park H**. 2023. Rare is Beautiful? The Interplay Between Rareness, Technology Search, and Technology Value. *Production and Operations Management*, 32(4), pp.1019-1040 [Link ☑]
- [26] Chopra S, **Park H**, Shim S. 2023. An Exact Solution Method for the Political Districting Problem. *Parallel Processing Letters*, 33(01n02), 2340001 [Link]
- [25] Min JH, Lee S, Cho DJ, Baek J-H, Park H. 2022. A Comparative Study of Vessel Trajectory Prediction Error based on AIS and LTE-Maritime Data. *Journal of Navigation and Port Research*, 46(6), pp.576-584 [Link Z]

- [24] **Park H**. 2022. [Book Review] A History of Data Visualization and Graphic Communication. *Journal of the American Statistical Association*, 117(539), pp.1601-1603 [Link 🔄]
- [23] Lee J, Park H, Zaggl M. 2022. When to Signal? Contingencies for Career-Motivated Contributions in Online Collaboration Communities. *Journal of the Association for Information Systems*, 23(6), pp.1386-1419 [Link ☑]
- [22] Park H, Blanco C, Bendoly E. 2022. Vessel Sharing and its Impact on Maritime Operations and Carbon Emissions. *Production and Operations Management*, 31(7), pp.2925-2942 [Link ☑]
- [21] Chopra S, Park H, Shim S. 2022. Extended Graph Formulation for the Inequity Aversion Pricing Problem on Social Networks. *INFORMS Journal on Computing*, 34(3), pp.1327-1344 [Link]
- [20] Basole RC, **Park H**. 2019. Interfirm Collaboration and Firm Value in Software Ecosystems: Evidence from Cloud Computing. *IEEE Transactions on Engineering Management*, 66(4), pp.568-582 [Link ☑]
- [19] Basole RC, **Park H**, Chao RO. 2019. Visual Analysis of Venture Similarity in Entrepreneurial Ecosystems. *IEEE Transactions on Engineering Management*, 66(3), pp.368-380 [Link ☑]
- [18] **Park H**, Bellamy MA, Basole RC. 2018. Structural Anatomy and Evolution of Supply Chain Alliance Networks: A Multi-Method Approach. *Journal of Operations Management*, 63, pp.79-96 [Link ♂]
- [17] Park BS, Park H, Ramanujam R. 2018. Tua Culpa: When an Organization Blames its Partner for Failure in a Shared Task. Academy of Management Review, 43(4), pp.792-811 [Link ☑]
- [16] Basole RC, Srinivasan A, Park H, Patel S. 2018. ecoxight: Discovery, Exploration and Analysis of Business Ecosystems using Interactive Visualization. <u>ACM Transactions on Management Information Systems</u>, 9(2), no. 6 [Link]
- [15] Ivannikova E, Park H, Hämäläinen T, Lee K. 2018. Revealing Community Structures by Ensemble Clustering using Group Diffusion. *Information Fusion*, 42, pp.24-36 [Link ☑]
- [14] Srinivasan A, Park H, Endert A, Basole RC. 2018. Graphiti: Interactive Specification of Attribute-based Edges for Network Modeling and Visualization. *IEEE Transactions on Visualization and Computer Graphics*, 24(1), pp.226-235 [Link]
- [13] Kim B-C, Lee J, **Park H**. 2017. Two-Sided Platform Competition with Multihoming Agents: An Empirical Study on the Daily Deals Market. *Information Economics and Policy*, 41, pp.36-53 [Link ☑]
- [12] Basole RC^{*}, Bellamy MA^{*}, Park H^{*}. 2017. Visualization of Innovation in Global Supply Chain Networks. Decision Sciences, 48(2), pp.288-306 [Link ☑]
- [11] Park H, Bellamy MA, Basole RC. 2016. Visual Analytics for Supply Network Management: System Design and Evaluation. *Decision Support Systems*, 91, pp.89-102 [Link ☑] [Live Demo □]
- [10] **Park H**^{*}, Basole RC^{*}. 2016. Bicentric Diagrams: Design and Applications of a Graph-Based Relational Set Visualization Technique. *Decision Support Systems*, 84, pp.64-77 [Link ☑] [Live Demo 및]
- [9] Basole RC, Bellamy MA, **Park H**, Putrevu J. 2016. Computational Analysis and Visualization of Global Supply Network Risks. *IEEE Transactions on Industrial Informatics*, 12(3), pp.1206-1213 [Link ♂]
- [8] Park H, Lee J, Kim BC. 2015. Project Selection in NIH: A Natural Experiment from ARRA. <u>Research Policy</u>, 44(6), pp.1145-1159 [Link ☑]
- [7] Basole RC, Braunstein M, Kumar V, Park H, Kahng M, Chau DHP, Tamersoy A, Hirsh DA, Serban N, Bost J, Lesnick B, Schissel BL, Thompson M. 2015. Understanding Variations in Pediatric Asthma Care Processes in the Emergency Department using Visual Analytics. *Journal of the American Medical Informatics Association* (JAMIA), 22(2), pp.318-323 [Link]
- [6] Basole RC, Russell MG, Hutamaki J, Rubens N, Still K, **Park H**. 2015. Understanding Business Ecosystem Dynamics: A Data-Driven Approach. *ACM Transactions on Management Information Systems*, 6(2), no. 6

[Link 🗷]

- [5] Basole RC, Qamar A, **Park H**, Paredis C, McGinnis LF. 2015. Visual Analytics for Early-Phase Complex Engineered System Design Support. *IEEE Computer Graphics and Applications*, 35(2), pp.41-51 [Link 🗗]
- [4] Basole RC, **Park H**, Barnett BC. 2015. Coopetition and Convergence in the ICT Ecosystem. <u>*Telecommunica-tions Policy*</u>, 39(7), pp.537-552 [Link ☑]
- [3] **Park H**, Lee K. 2014. Dependence Clustering, a Method Revealing Community Structure with Group Dependence. *Knowledge-Based Systems*, 60, pp.58-72 [Link ☑]
- [2] Basole RC, Bellamy MA, Clear T, Dabkowski M, Monreal J, Park H, Valerdi R, Van Aken EM. 2013. Challenges and Opportunities for Enterprise Transformation Research. *Journal of Enterprise Transformation*, 3(4), pp.330-352 [Link 2]
- [1] Park H, Clear T, Rouse WB, Basole RC, Braunstein M, Brigham KL, Cunningham L. 2012. Multi-Level Simulations of Health Delivery Enterprises Flight Simulators for Policy, Strategy, Planning, and Management. *Service Science*, 4(3), pp.253-268 [Link ☑]

REFERRED CONFERENCE PROCEEDINGS

- [3] Lee J, Jung HJ, **Park H**. 2020. Rare is Beautiful? Rare Technological Resources and Value Implications. *Academy of Management Best Paper Proceedings*, no. 12962
- [2] **Park H**, Basole RC. 2015. Product Innovation Contest on Service Network: Competitive Spillover from Exclusive Dealing. *Academy of Management Best Paper Proceedings*, no. 13284
- [1] **Park H**, Lee J. 2015. An (Almost) Free Lunch? Social Recognition and Knowledge Sharing Behavior in a Virtual Community. *Academy of Management Best Paper Proceedings*, no. 13279

BOOK CHAPTERS AND TECHNICAL REPORTS

- Ghemawat P, Altman SA. *DHL Global Connectedness Index 2014*. November 2014 (Chapter II: Visualizing Global Connectedness)
- Glushko RJ. *Discipline of Organizing*. MIT Press. May 2013 (Chapter 9: Interactions with Resources)
- Dai JG, Park H. Stochastic Manufacturing and Service Systems. (Unpublished lecture notes)

AWARDS, GRANTS, AND HONORS

Awards and Honors

- Best Paper Award Finalist, Academy of Management Operations & Supply Chain Management (OSCM) Division, 2020
- Best Dissertation Award Runner-up, INFORMS Technology, Innovation Management and Entrepreneurship Section (TIMES), 2017
- Best Paper Award Winner, Academy of Management Organizational Communication & Information Systems (OCIS) Division, 2017
- Honorable Mention, 13th Places & Spaces: Mapping Science, 2017
- Best Student Paper Award Winner, Academy of Management Technology & Innovation Management (TIM) Division, 2015
- Dr. James R. Chen Award (Best Master's project in one of three tracks), *School of Information, UC Berkeley*, 2010
- Excellence Award (1st place), Idea Competition awarded by CEO of Samsung Electronics, 2005
- Army Commendation Medal, *Department of the United States Army*, 2005
- Presidential Scholar, awarded by President of the Republic of Korea, 2002
- Gold Medalist, 33rd International Chemistry Olympiad, 2001

Fellowship

- Tennenbaum Institute Fellow, Georgia Institute of Technology, 2010-2017
- McLean Fellowship, Georgia Institute of Technology, 2013-2015
- Doctoral Fellow, Systems Engineering Research Center, 2014
- George Fellowship, Health Systems Institute, Georgia Institute of Technology, 2012
- John Morris Fellowship, School of Industrial and Systems Engineering, Georgia Institute of Technology, 2010-2012
- Doctoral Fellowship, Korea Foundation for Advanced Studies, 2010-2015
- Overseas Study Scholarship, Samsung Foundation, 2008-2010
- Undergraduate Fellowship, Korea Foundation for Advanced Studies, 2002-2008

Grants

- PI, Korea NRF Emerging Scholar Program (Equivalent to NSF Career), 2022-2027
- PI, SNU New Faculty Startup Fund, 2021-2024
- **Co-investigator**, FDA Broad Agency Announcement (BAA) "FDA Quality Management and Pharmaceutical Firm Learning to Reduce Drug Quality Risks" (Total: \$1.7M), 2019-2021
- Co-investigator, U01 Grant from FDA to NIPTE "Manufacturing Sector Research Initiative" (Total: \$2.5M), 2018–2019
- Honorarium from Conference on Internet Search and Innovation, Northwestern University, 2013
- NET Institute (Networks, Electronic Commerce, and Telecommunications) Grants for Summer 2012
- Research Promotion Grant, Korea Science and Engineering Foundation, 2002-2008

TEACHING EXPERIENCE

The Ohio State University, Fisher College of Business

- Advising & Committee
 - In Joon Noh (Fisher), Committee Member, SP20 (Placement: Penn State University)
 - Rahul Pandey (Fisher), Committee Member, SP20 (Placement: University of Memphis)
 - Junpeng Wang (Computer Science), Committee Member, SP19 (Placement: VISA Research)
 - Yingchao Lan (Fisher), Committee Member, SP18 (Placement: University of Nebraska–Lincoln)
- Instructor
 - BM7331 Descriptive Analytics and Visualization; SP19, SP20
 - BM2320 Business Statistics; SP18, SP19, SP20
- Course Development
 - BM7331 Descriptive Analytics and Visualization; AU17-AU18

Georgia Institute of Technology, School of Industrial and Systems Engineering

- Instructor, ISyE 3232 Stochastic Manufacturing and Service Systems (Undergraduate Core Stochastic Course), SU11, Average course evaluation rating: 4.4/5.0
- TA for Prof. Jim Dai, ISyE 3232, SP11

UC Berkeley, School of Information

- TA for Prof. Robert Glushko, INFO 290-1 Information and Service System Design, SP09
- TA for Prof. John Chuang, INFO 206 Distributed Computing Applications and Infrastructure, AU09

PROFESSIONAL SERVICE

Professional Membership

- Institute of Operations Research and Management Science (INFORMS)
- Production and Operations Management Society (POMS)
- Decision Sciences Institute (DSI)
- Academy of Management (AOM)
- Industry Studies Association (ISA)

Board Officer

- Chair for INFORMS TIMES Section 2024
- Chair-Elect for INFORMS TIMES Section 2023
- Vice Chair for Programs for INFORMS TIMES Section 2022
- Vice Chair for Membership & Communication for INFORMS TIMES Section 2021

Track Chair

- TIME/NPD Track for INFORMS Annual Meeting 2022
- NPD Track for INFORMS Annual Meeting 2021

Session Chair

- INFORMS Annual Meeting 2017, 2019, 2020
- POMS Annual Meeting 2016, 2019

University and Department Service

- Seoul National University
 - Samsung Research-SNU Project Committee 2022
 - Graduate School of Data Science Scholarship Committee 2022
 - AI-X Curriculum Committee 2021-2023
- The Ohio State University
 - Analytics Curriculum Committee 2020-2021
 - Faculty Recruiting Committee 2018

Editorial Review Board

- Decision Sciences Journal (DSJ)
- Journal of Operations Management (JOM)

Ad-hoc Reviewer

• Journals

Decision Sciences Journal (DSJ), Decision Support Systems (DSS), European Journal of Operations Research (EJOR), IEEE Transactions on Engineering Management (TEM), IEEE Transactions on Visualization and Computer Graphics (TVCG), Information & Management, International Journal on Human-Computer Interaction (IJHCI), Journal of Business Logistics (JBL), Journal of International Business Studies (JIBS), Journal of Machine Learning Research (JMLR), Journal of Operations Management (JOM), Journal of Technology Transfer (JOTT), PLOS One, Production and Operations Management (POM), Research Policy (RP), Service Science

• Conferences

Academy of Management Conference (AOM), ACM SIGCHI Conference (CHI), Decision Sciences Institute (DSI), Hawaii International Conference on System Sciences (HICSS), IEEE Technology and Engineering Management Conference (TEMSCON), IEEE Visualization Conference (VIS), International Conference on Information Systems (ICIS)

INVITED TALKS

- School of Electrical Engineering, Seoul National University, S. Korea, 2022
- Department of Industrial Engineering, Seoul National University, S. Korea, 2022
- Graduate School of Data Science, Seoul National University, S. Korea, 2021
- Department of Industrial and Systems Engineering, KAIST, S. Korea, 2019
- Yonsei University Business School, S. Korea, 2019
- Korea University Business School, S. Korea, 2018
- Department of Business and Technology Management, KAIST, S. Korea, 2018
- Graduate School of Convergence Science and Technology, Seoul National University, S. Korea, 2017
- Operations Research Group, IBM Thomas J. Watson Research Center, NY, USA, 2017
- Department of Computer Science and Engineering, The Ohio State University, OH, USA, 2017

- Fox School of Business, Temple University, Philadelphia, PA, USA, 2017
- Warwick Business School, University of Warwick, Coventry, UK, 2017
- Nanyang Business School, Nanyang Technological University, Singapore, 2017
- Fisher College of Business, The Ohio State University, Columbus, OH, USA, 2017
- E. J. Ourso College of Business, Louisiana State University, Baton Rouge, LA, USA, 2016
- College of Business, University of Illinois at Chicago, Chicago, IL, USA, 2016
- Graduate School of Convergence Science and Technology, Seoul National University, S. Korea, 2012

CONFERENCE PRESENTATIONS

(* denotes presentation by co-author; + denotes poster.)

- Supply Network Reconfiguration in Industry Transition: A Study of Electric Vehicles in the Automotive Industry
 - DSI Annual Meeting, Virtual Conference, 2020
- Rare is Beautiful? Rare Technological Resources and Value Implications
 - INFORMS Annual Meeting, Virtual Conference, 2020
 - AOM Annual Meeting, Virtual Conference, 2020
 - DRUID Conference, New York, NY, 2017*
- Dealing with Messy Data (Workshop)
 - DSI Annual Meeting, Virtual Conference, 2020
 - DSI Annual Meeting, New Orleans, LA, 2019
- User-Generated Web Data Predicts Quality Risk: Evidence from the Pharmaceutical Industry
 - PDA/FDA Joint Regulatory Conference, Washington, DC, 2019
- Workplace Environment Transparency, Employee Satisfaction, and Firm Innovation Performance
 - DSI Annual Meeting, New Orleans, LA, 2019
 - INFORMS Annual Meeting, Seattle, WA, 2019
 - POMS Annual Meeting, Washington, DC, 2019
- Disruption Warning Signal Attributes' Effect on Firm Performance: Evidence from National Hurricane Center and Airlines
 - DSI Annual Meeting, New Orleans, LA, 2019*
 - INFORMS Annual Meeting, Seattle, WA, 2019*
 - POMS Annual Meeting, Washington, DC, 2019*
- The Resilience of Airline Networks to Severe Weather
 - DSI Annual Meeting, New Orleans, LA, 2019*
 - INFORMS Annual Meeting, Seattle, WA, 2019*
 - POMS Annual Meeting, Washington, DC, 2019*
- A Comparative Study of Supply Network Robustness: Topological Sensitivity Analysis for Random and Targeted Disruptions
 - INFORMS Annual Meeting, Seattle, WA, 2019
 - INFORMS Annual Meeting, Phoenix, AZ, 2018
- Predicting Drug Recalls using Social Media Data
 - INFORMS Annual Meeting, Phoenix, AZ, 2018
- Technological Innovation Spillovers in Supply Networks
 - POMS Annual Meeting, Houston, TX, 2018
- Structural Redundancy for Managing Supply Chain Disruption Risks: An Empirically Informed Investigation of Real-World Multi-Echelon Supply Networks
 - DSI Annual Meeting, Washington, DC, 2017

- A Bicentric Diagram Approach to Manage Interdependencies when Designing Complex Systems

 INFORMS Annual Meeting, Houston, TX, 2017
- Archetypes of Entrepreneurship: From Ideas to Products to Funding
 INFORMS Annual Meeting, Houston, TX, 2017
- Structural Anatomy and Evolution of Supply Networks: A Multi-Method Approach
 INFORMS Annual Meeting, Houston, TX, 2017
- I'm Doing This for You (And Me!): Career Concern as Motivation in Online Collaboration Communities
 AOM Annual Meeting, Atlanta, GA, 2017*
- Strategic Positioning in Global Entrepreneurship Ecosystems
 - POMS Annual Meeting, Seattle, WA, 2017
 - Product and Service Innovation (PSI), Midway, UT, 2017
 - DSI Annual Meeting, Austin, TX, 2016
 - INFORMS Annual Meeting, Nashville, TN, 2016
- Product Innovation Contest on Service Network: Competitive Spillover from Exclusive Dealing
 - INFORMS Annual Meeting (TIMES Best Dissertation Session), Houston, TX, 2017
 - POMS Annual Meeting, Seattle, WA, 2017
 - DSI Annual Meeting, Austin, TX, 2016
 - INFORMS Annual Meeting, Nashville, TN, 2016
 - AOM Annual Meeting, Vancouver, BC, Canada, 2015
 - Atlanta Competitive Advantage Conference (ACAC), Atlanta, GA, 2015
 - Industry Studies Association (ISA), Kansas City, MO, 2015
- An (Almost) Free Lunch? Social Recognition and Knowledge Sharing Behavior in a Virtual Community
 - Wharton People and Organizations Conference, Philadelphia, PA, 2019
 - Open and User Innovation (OUI) Conference, Boston, MA, 2016
 - AOM Annual Meeting, Vancouver, BC, Canada, 2015*
- Dynamic Co-evolution of Supply Network Structure: Accessibility and Interconnectedness
 POMS Annual Meeting, Orlando, FL, 2016
- Integrated Analytics Framework for Business Ecosystem Dynamics
 - POMS Annual Meeting, Orlando, FL, 2016
 - INFORMS Annual Meeting, Philadelphia, PA, 2015
- Integrated Interactive Visual Analytics Framework for Supply Chain Network Management

 IEEE VIS Workshop, Chicago, IL, 2015
- Project Selection in NIH: A Natural Experiment from ARRA
 - ISA, Kansas City, MO, 2015
 - DRUID Conference, Rome, Italy, 2015*
- Firm Value of Product Innovation in Service Ecosystem: A Study of Smartphones
 - ISA, Kansas City, MO, 2015
 - INFORMS Annual Meeting, San Francisco, CA, 2014
- Bicentric Diagrams: Design and Applications of a Graph-Based Relational Set Visualization Technique
 ACM SIGCHI Conference, Seoul, Korea, 2015⁺
- Simulation of Business Ecosystem Dynamics using Big Data: Framework Formulation and Validation
 Systems Engineering Research Center (SERC), Washington, DC, 2014
- Product Innovation and Platform Strategy: A Technology Evolution Perspective
 - INFORMS Annual Meeting, San Francisco, CA, 2014
 - POMS Annual Meeting, Atlanta, GA, 2014

- Georgia Tech Research & Innovation Conference, Georgia Tech, Atlanta, GA, 2013⁺
- Product-Service Network and Interfirm Alliance in the Mobile Ecosystem: Network Visualization and Dyadic Analysis
 - POMS Annual Meeting, Atlanta, GA, 2014
 - INFORMS Annual Meeting, Minneapolis, MN, 2013
- Useful Descriptive and Prescriptive Computational Tools for Social Science
 - Computational Social Science Workshop, Emory University, Atlanta, GA, 2013⁺
- Dynamic Platform Competition in a Two-Sided Market: Evidence from the Online Daily Deals Promotion Industry
 - Atlanta Competitive Advantage Conference (ACAC), Atlanta, GA, 2013*
 - NET Institute Conference, Berkeley, CA, 2013*
 - Annual Conference on Internet Search and Innovation, Northwestern University, Chicago, IL, 2013*
 - Strategic Management Society Conference, Atlanta, GA, 2013*
 - Southern Economic Association Conference, Tampa, FL, 2013*

OTHER RESEARCH AND PROFESSIONAL EXPERIENCE

- Vanderbilt University Medical Center, Nashville, TN (Summer 2012): Visiting Researcher
 Conducted field interviews and organized findings for a patient-centered medical home project
- IBM Research, Bangalore, India (Summer 2010): Summer Intern
 Developed service modeling framework for public services using the service blueprinting method
- UC Berkeley, Berkeley, CA (Spring 2010): *Graduate Student Researcher* for Prof. Morten T. Hansen – Computed financial performance metrics for global CEO rankings project
- UC Berkeley, Berkeley, CA (2009): *Graduate Student Researcher* for Prof. Robert G. Glushko – Participated in developing a new course "Information System & Service Design"
- Samsung Electronics, Seoul, Korea (2005-2008): Summer Intern and Part-time Student Research Assistant at Corporate Design Center
 - Compared handset development strategy of Nokia, Motorola, and Samsung
 - Created mobile handset and service roadmap projections for 2007-2010
 - Conducted user studies for developing representative user profiles for camera and mobile phone
- United States Forces Korea, Seoul, Korea (2003-2005): Web Developer (Obligatory Military Service)
 Maintained decision support and procurement systems within security domain

SOFTWARE

- Bicentric Diagrams: http://bicentric.herokuapp.com/
- Visual Supply Chain Management: http://visualscm.herokuapp.com/
- ecoxight (Business Ecosystem Intelligence System): https://ecoxight.com/