Stanford



Martin Fischer

Kumagai Professor in the School of Engineering and Senior Fellow at the Precourt Institute for Energy

Civil and Environmental Engineering

CONTACT INFORMATION

- **Administrator**

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Bio

BIO

Professor Fischer's research goals are to improve the productivity of project teams involved in designing, building, and operating facilities and to enhance the sustainability of the built environment. His work develops the theoretical foundations and applications for virtual design and construction (VDC). VDC methods support the design of a facility and its delivery process and help reduce the costs and maximize the value over its lifecycle. His research has been used by many small and large industrial government organizations around the world.

ACADEMIC APPOINTMENTS

- Professor, Civil and Environmental Engineering
- Senior Fellow, Precourt Institute for Energy
- Member, Wu Tsai Human Performance Alliance

ADMINISTRATIVE APPOINTMENTS

- Director, Center for Integrated Facility Engineering - CIFE, (2001- present)
- Faculty Co-Director, Frontier Technology Lab - FTL, (2023- present)

HONORS AND AWARDS

- Walter Gropius Prize, Bauhaus 4.0 Conference (2019)
- Member, National Academy of Construction (2018)
- Technical Achievement Award, Project Production Institute (2018)
- Peurifoy Construction Research Award, ASCE (2017)
- Best Paper, Journal of Architectural Engineering, American Society of Civil Engineers (2014)
- Fellow in Circular Economy, Schmidt-MacArthur Foundation (2014)
- Foreign Member, Royal Academy of Engineering Sciences, Sweden (2012)
- Honorary Senior Fellow, Design Futures Council (2006)
- Best Paper, Journal of Computing in Civil Engineering, American Society of Civil Engineers (2002)

- Best Paper, Artificial Intelligence in Design (2000)
- Eugene L. Grant Award for Excellence in Teaching, Eugene L. Grant (1999)
- Hoefer Prize for Excellence in Undergraduate Writing, Stanford University (1997,1998, 2005)
- Top 25 Newsmaker, Engineering News Record (1996)

PROFESSIONAL EDUCATION

- Diplôme d'Ingénieur, EPFL - Swiss Federal Institute of Technology, Lausanne , Civil Engineering (1984)
- MS, Stanford University , Industrial Engineering - Engineering Management (1987)
- PhD, Stanford University , Civil Engineering - Construction Engineering and Management (1991)

LINKS

- https://web.stanford.edu/~fischer: https://web.stanford.edu/~fischer

Teaching

COURSES

2026-27

- Entrepreneurship through the Lens of Venture Capital: CEE 216 (Spr)
- Managing Fabrication and Construction: CEE 241 (Aut)
- Managing Sustainable Building Projects: CEE 100 (Aut)
- Virtual Design and Construction: CEE 341 (Win)

2025-26

- Building Trust: CEE 240S (Win)
- Managing Fabrication and Construction: CEE 241 (Aut)
- Managing Sustainable Building Projects: CEE 100 (Aut)
- Virtual Design and Construction: CEE 341 (Win)

2024-25

- Artificial Intelligence Applications in the AEC Industry: CEE 329 (Spr)
- Building Trust: CEE 240S (Spr)
- Entrepreneurship through the Lens of Venture Capital: CEE 216 (Spr)
- Managing Fabrication and Construction: CEE 241 (Aut)
- Managing Sustainable Building Projects: CEE 100 (Aut)
- Virtual Design and Construction: CEE 341 (Win)

2023-24

- Artificial Intelligence Applications in the AEC Industry: CEE 329 (Win)
- Entrepreneurship through the Lens of Venture Capital: CEE 216 (Win)
- Frontier Technology: Understanding and Preparing for Technology in the Next Economy: CEE 114, CEE 214, MED 114, MED 214, PSYC 114 (Spr)
- Industrialized Construction: CEE 324 (Spr)
- Managing Fabrication and Construction: CEE 241 (Aut)
- Managing Sustainable Building Projects: CEE 100 (Aut)
- Virtual Design and Construction: CEE 341 (Win)

STANFORD ADVISEES

Aakanksha Chaudhary

Doctoral Dissertation Reader (AC)

Martin Bucher, Mateus De Castro Ribeiro, Fred Fan, Eleanor Ho

Doctoral Dissertation Advisor (AC)

Eleni Alexandraki, Simi Aluko, JINPU CAO, Allie Cemalovic, Yaojing Huang He, Zahra Mazlaghani, Lavinia Pedrollo, Steinar Rasmussen, Lou Sacchettini, Giulia Scagliotti

Master's Program Advisor

Gary Anderson, Noriko Ando, Giacomo Bellini, Joanna Chan, Fei Cheng, Amelie Clark, Caius Cowgill, Brooks Davis, Rita Duan, Elysee Ekanga, Albino Ferreras, Masafumi Fukasawa, Kira Goldberg, Osamu Higashibata, Kexin Huang, Tina Huang, Steffi Huaranga Galarza, Atharva Hrishikesh Javalkar, Fumiya Kato, Kerem Koran, Larry Liu, Gustav Ljunggren, Frank Llave Garcia, Mariko Mori, Edoardo Pantano, Ishaan Patel, Zhaoyu Peng, Izabella Smolnicka-Dos Santos, Harold Suarez Torres, Carlos Vilchez Olivares, Santiago Volio Soley, George Zheng, Leopoldo Zuloeta Carrasco

Doctoral (Program)

Eleni Alexandraki, JINPU CAO, Allie Cemalovic, Oluwapelumi Egunjobi, Nino Giorgadze, Dan Kuepper, Philip Kuo, Zahra Mazlaghani, Lavinia Pedrollo, Guillermo Prado Lujan, Steinar Rasmussen, Lou Sacchettini, Giulia Scagliotti, Vaishnavi Thumuganti

Publications

PUBLICATIONS

- **Deep Sketch-Based 3D Modeling: A Survey** *COMPUTER GRAPHICS FORUM*
  Tono, A., Wu, J., Wetzstein, G., Armeni, I., Subramonyam, H., Landay, J., Fischer, M.
  2026
- **Ontology-Based Modeling and Reasoning for Construction Field Context** *JOURNAL OF MANAGEMENT IN ENGINEERING*
  Liu, R., Fischer, M.
  2026; 42 (1)
- **Author Correction: A Large-Scale Image Repository for Automated Pavement Distress Analysis and Degradation Trend Prediction.** *Scientific data*
  Yang, H., Cao, J., Wan, J., Gao, Q., Liu, C., Fischer, M., Du, Y., Li, Y., Jain, P., Wu, D.
  2025; 12 (1): 1631
- **Reinforced ridges in Thwaites Glacier yield insights into resolution requirements for coupled ice sheet and solid Earth models** *CRYOSPHERE*
  Houriez, L., Larour, E., Caron, L., Schlegel, N., Adhikari, S., Ivins, E., Pelle, T., Seroussi, H., Darve, E., Fischer, M.
  2025; 19 (10): 4355-4372
- **A Large-Scale Image Repository for Automated Pavement Distress Analysis and Degradation Trend Prediction.** *Scientific data*
  Yang, H., Cao, J., Wan, J., Gao, Q., Liu, C., Fischer, M., Du, Y., Li, Y., Jain, P.
  2025; 12 (1): 1426
- **A Context Taxonomy for Construction Field Crew Members** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Liu, R., Fischer, M.
  2025; 151 (3)
- **VibraFarrow - Pig Farrowing Time Prediction Using Ambient Floor Vibrations**
  Cao, J., Marshall, L., Codling, J. R., Sharma, S., Brown-Brandl, T., Fischer, M., Zhang, P., Noh, H., Dong, Y., ACM
  ASSOC COMPUTING MACHINERY.2025: 334-335
- **Correction: A review of Obayashi's fleet management system using a robotics evaluation framework** *Construction Robotics*

Cesar Augusto, P., Daniel, D., Takuo, N., Cynthia, B., Martin, F.
2025; 9 (5): 1

- **Between Words and Deeds: Case Studies Exploring the Rhetoric and Reality of Environmentally Sustainable Building Projects** *Proceedings of Smart and Sustainable Built Environment Conference 2025*
  Giulia, S., Eleni, A., David, K., Martin, F.
  2025: 116-126
- **Comparison of dusty robotics and traditional layout methods** *Construction Robotics*
  Alexis, K., Yuuki, T., Cynthia, B., Henning, R., Tessa, L., Martin, F.
  2025; 9 (2): 22
- **AI for the Built Environment: An Opportunity to Improve Safety, Efficiency, and Sustainability** *Socio-economic Impact of Artificial Intelligence: A European Management Perspective*
  Giulia, S., Ashwin, A., Martin, F. A.
  Springer Nature Switzerland.2025: 119-134
- **Analyzing Attributes and Objectives of MEP Buildability Issue Descriptions: A Comparison of VR and Non-VR**
  Girgin, S., Fruchter, R., Fischer, M.
  edited by Akinci, B., Berges, M., Jazizadeh, F., Menassa, C. C., Yeoh, J.
  AMER SOC CIVIL ENGINEERS.2025: 312-320
- **VibraFarrow: Pig Farrowing Time Prediction Using Ambient Floor Vibrations**
  Cao, J., Marshall, L., Codling, J. R., Sharma, S., Brown-Brandl, T., Fischer, M., Zhang, P., Noh, H., Dong, Y., ACM
  ASSOC COMPUTING MACHINERY.2025: 150-160
- **Decentralized project delivery on the crypto commons: Conceptualization, governance mechanisms, and future research directions** *PROJECT LEADERSHIP AND SOCIETY*
  Hunhevicz, J. J., Hall, D. M., Brasey, P., Bonanomi, M. M. M., Fischer, M.
  2024; 5
- **Vitruvio: Conditional variational autoencoder to generate building meshes via single perspective sketches** *AUTOMATION IN CONSTRUCTION*
  Tono, A., Huang, H., Agrawal, A., Fischer, M.
  2024; 166
- **Managing On-Site Production Using an Activity and Flow-Based Construction Model** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Garcia-Lopez, N. P., Fischer, M.
  2024; 150 (1)
- **Construction Cost Savings through VR-Based Early Identification of Operability Issues: A Comparative Case Study**
  Girgin, S., Fruchter, R., Fischer, M.
  edited by Turkan, Y., Louis, J., Leite, F., Ergan, S.
  AMER SOC CIVIL ENGINEERS.2024: 146-153
- **A Comparative Case Study to Assess the Costs and Benefits of VR Use during Preconstruction MEP Coordination**
  Girgin, S., Fruchter, R., Fischer, M.
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- **Dynamic prompt-based virtual assistant framework for BIM information search** *AUTOMATION IN CONSTRUCTION*
  Zheng, J., Fischer, M.
  2023; 155
- **Points for energy renovation (PointER): A point cloud dataset of a million buildings linked to energy features.** *Scientific data*
  Krapf, S., Mayer, K., Fischer, M.
  2023; 10 (1): 639
- **Digital Twin: Where do humans fit in?** *AUTOMATION IN CONSTRUCTION*
  Agrawal, A., Thiel, R., Jain, P., Singh, V., Fischer, M.

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- **Estimating building energy efficiency from street view imagery, aerial imagery, and land surface temperature data** *APPLIED ENERGY*
  Mayer, K., Haas, L., Huang, T., Bernabe-Moreno, J., Rajagopal, R., Fischer, M.
  2023; 333
- **PAPER Applying Project-Based Learning (PBL) for Teaching Virtual Design Construction (VDC)** *INTERNATIONAL JOURNAL OF ENGINEERING PEDAGOGY*
  Del Savio, A., Carrasco, L., Nakamatsu, E., Velarde, K., Martinez-Alonso, W., Fischer, M.
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- **A CASE STUDY TOWARDS ASSESSING THE IMPACT OF MIXED REALITY-BASED INSPECTION AND RESOLUTION OF MEP ISSUES DURING CONSTRUCTION** *JOURNAL OF INFORMATION TECHNOLOGY IN CONSTRUCTION*
  Girgin, S., Fruchter, R., Fischer, M.
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- **Classifying building energy efficiency from street view and aerial images in Denmark**
  Mayer, K., Heilborn, G., Fischer, M., ACM
  ASSOC COMPUTING MACHINERY.2023: 220-223
- **Virtual Design and Construction (VDC) Framework: A Current Review, Update and Discussion** *APPLIED SCIENCES-BASEL*
  Del Savio, A., Quincot, J., Montalto, A., Delgado, L., Fischer, M.
  2022; 12 (23)
- **Methodology to estimate logistics costs for vertically transported prefabricated wall panels** *JOURNAL OF COMPUTATIONAL DESIGN AND ENGINEERING*
  Lee, Y., Kim, J., Flager, F., Fischer, M.
  2022; 9 (4): 1348-1368
- **Digital Twin: From Concept to Practice** *JOURNAL OF MANAGEMENT IN ENGINEERING*
  Agrawal, A., Fischer, M., Singh, V.
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- **Assessment Framework for Additive Manufacturing in the AEC Industry** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Mrazovic, N., Fischer, M.
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- **Safety, quality, schedule, and cost impacts of ten construction robots.** *Construction robotics*
  Brosque, C., Fischer, M.
  2022; 6 (2): 163-186
- **A New Perspective on Digital Twins: Imparting Intelligence and Agency to Entities** *IEEE JOURNAL OF RADIO FREQUENCY IDENTIFICATION*
  Agrawal, A., Singh, V., Fischer, M.
  2022; 6: 871-875
- **Impacts of Stacking Plans on Carbon Emissions during Transportation of Prefabricated Exterior Wall Panels**
  Lee, Y., Chin, S., Fischer, M.
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- **A Comparative Analysis of Production Metrics across VDC Implementations**
  Majumdar, T., Rasmussen, S. G., Del Savio, A., Johannesdottir, K., Hjelseth, E., Fischer, M.
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- **Digital Twin in Practice: Emergent Insights from an Ethnographic-Action Research Study**
  Agrawal, A., Singh, V., Thiel, R., Pillsbury, M., Knoll, H., Puckett, J., Fischer, M.
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- **Measuring the impact of blockchain and smart contracts on construction supply chain visibility** *ADVANCED ENGINEERING INFORMATICS*
  Hamledari, H., Fischer, M.
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- **Cost-based optimization of steel frame member sizing and connection type using dimension increasing search** *OPTIMIZATION AND ENGINEERING*
  Peng, B., Flager, F., Barg, S., Fischer, M.
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- **Empirical Study of Identifying Logistical Problems in Prefabricated Interior Wall Panel Construction** *JOURNAL OF MANAGEMENT IN ENGINEERING*
  Lee, Y., Kim, J., Khanzode, A., Fischer, M.
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- **Measuring Progress and Productivity in Model-Driven Engineering for Capital Project Delivery** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Garcia, G., Golparvar-Fard, M., de la Garza, J. M., Fischer, M.
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- **Comparative Analysis of Manual and Robotic Concrete Drilling for Installation Hangers** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
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  Lee, Y., Kim, J., Flager, F., Fischer, M.
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- **Automation of Inspection Mission Planning Using 4D BIMs and in Support of Unmanned Aerial Vehicle–Based Data Collection** *Journal of Construction Engineering and Management*
  Hamledari, H., Sajedi, S., McCabe, B., Fischer, M.
  2021; 147 (3)
- **Construction payment automation using blockchain-enabled smart contracts and robotic reality capture technologies** *Automation in Construction*
  Hamledari, H., Fischer, M.
  2021; 132
- **The application of blockchain-based crypto assets for integrating the physical and financial supply chains in the construction & engineering industry** *Automation in Construction*
  Hamledari, H., Fischer, M.
  2021; 127
- **A design-focused, cost-ranked, structural-frame sizing optimization** *JOURNAL OF BUILDING ENGINEERING*
  Barg, S., Flager, F., Fischer, M.
  2020; 30
- **Empirical Determination of the Smallest Batch Sizes for Daily Planning" by Min Ho Song and Martin Fischer (vol 13, pg 871, 2020)** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Song, M., Fischer, M.
  2020; 146 (7)
- **Generating a Daily Bill of Materials at Level of Development 400 Using the Smallest Workface Boundary** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Song, M., Fischer, M.
  2020; 146 (5)
- **Daily plan-do-check-act (PDCA) cycles with level of development (LOD) 400 objects for foremen** *ADVANCED ENGINEERING INFORMATICS*
  Song, M., Fischer, M.

2020; 44

- **Empirical Determination of the Smallest Batch Sizes for Daily Planning** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Song, M., Fischer, M.
  2020; 146 (3)
- **Virtual design and construction** *CONSTRUCTION MANAGEMENT AND ECONOMICS*
  Kunz, J., Fischer, M.
  2020
- **Role of Blockchain-Enabled Smart Contracts in Automating Construction Progress Payments** *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*
  Hamledari, H., Fischer, M.
  2020; 13 (1)
- **Human-Robot Collaboration in Construction: Opportunities and Challenges**
  Brosque, C., Galbally, E., Khatib, O., Fischer, M., IEEE
  IEEE.2020: 338-345
- **Comparison of Construction Robots and Traditional Methods for Drilling, Drywall, and Layout Tasks**
  Brosque, C., Skeie, G., Orn, J., Jacobson, J., Lau, T., Fischer, M., IEEE
  IEEE.2020: 346-359
- **Assessing the Effects of Failure Alerts on Transitions of Control from Autonomous Driving Systems**
  Fu, E., Hyde, D., Sibi, S., Johns, M., Fischer, M., Sirkin, D., IEEE
  IEEE.2020: 1956-1963
- **Is Too Much System Caution Counterproductive? Effects of Varying Sensitivity and Automation Levels in Vehicle Collision Avoidance Systems**
  Fu, E., Johns, M., Hyde, D. A. B., Sibi, S., Fischer, M., Sirkin, D., ACM
  ASSOC COMPUTING MACHINERY.2020
- **The Car That Cried Wolf: Driver Responses to Missing, Perfectly Performing, and Oversensitive Collision Avoidance Systems**
  Fu, E., Sibi, S., Miller, D., Johns, M., Mok, B., Fischer, M., Sirkin, D., IEEE
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- **3D Scene Graph: A structure for unified semantics, 3D space, and camera**
  Armeni, I., He, Z., Gwak, J., Zamir, A. R., Fischer, M., Malik, J., Savarese, S., IEEE
  IEEE.2019: 5663–72
- **Evaluation of Reshuffling Efforts to Comply with Installation Sequences of Prefabricated Interior Wall Panels from Bunks Delivered On Site**
  Lee, Y., Fischer, M., Kim, J.
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- **A Method to Provide Integrated Design through Systems-Level Automation**
  Barg, S., Flager, F., Fischer, M.
  edited by Cho, Y. K., Leite, F., Behzadan, A., Wang, C.
  AMER SOC CIVIL ENGINEERS.2019: 385–92
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  Kim, J., Fischer, M., Kam, C.
  2018; 96: 378–97
- **Formal representation of cost and duration estimates for hard rock tunnel excavation** *AUTOMATION IN CONSTRUCTION*
  Kim, J., Fischer, M., Suh, M.
  2018; 96: 337–49
- **Parametric analysis of design stage building energy performance simulation models** *ENERGY AND BUILDINGS*
  Shiel, P., Tarantino, S., Fischer, M.

2018; 172: 78–93

- **Construction Parts in Building Projects: Definition and Case Study** *JOURNAL OF MANAGEMENT IN ENGINEERING*
  Zhao, N., Kam, C., Lo, J. T. Y., Kim, J., Fischer, M.
  2018; 34 (4)
- **Guiding building professionals in selecting additive manufacturing technologies to produce building components** *MATERIALS TODAY COMMUNICATIONS*
  Mrazovic, N., Baumers, M., Hague, R., Fischer, M.
  2018; 15: 199–202
- **An analytical method to estimate the total installed cost of structural steel building frames during early design** *JOURNAL OF BUILDING ENGINEERING*
  Barg, S., Flager, F., Fischer, M.
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- **Making Each Workhour Count: Improving the Prediction of Construction Durations and Resource Allocations**
  Fischer, M., Garcia-Lopez, N. P., Morkos, R.
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  Song, M. H., Fischer, M., Theis, P.
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  Becker, A., Chase, N. T., Fischer, M., Schwegler, B., Mosher, K.
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  Kim, J. I., Kim, J., Fischer, M., Orr, R.
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- **Semiautomated Scaffolding Planning: Development of the Feature Lexicon for Computer Application** *JOURNAL OF COMPUTING IN CIVIL ENGINEERING*
  Kim, J., Fischer, M., Kunz, J., Levitt, R.
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- **Ranking appliance energy efficiency in households: Utilizing smart meter data and energy efficiency frontiers to estimate and identify the determinants of appliance energy efficiency in residential buildings** *ENERGY AND BUILDINGS*
  Kavousian, A., Rajagopal, R., Fischer, M.
  2015; 99: 220-230
- **Towards seaport resilience for climate change adaptation: Stakeholder perceptions of hurricane impacts in Gulfport (MS) and Providence (RI)** *PROGRESS IN PLANNING*
  Becker, A. H., Matson, P., Fischer, M., Mastrandrea, M. D.
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- **Automated updating of space design requirements connecting user activities and space types** *AUTOMATION IN CONSTRUCTION*
  Kim, T. W., Kim, Y., Cha, S. H., Fischer, M.

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- **Ontology for Representing Building Users' Activities in Space-Use Analysis** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Kim, T. W., Fischer, M.
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- **Fully Constrained Design: A general and scalable method for discrete member sizing optimization of steel truss structures** *COMPUTERS & STRUCTURES*
  Flager, F., Soremekun, G., Adya, A., Shea, K., Haymaker, J., Fischer, M.
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- **Sharing of Temporary Structures: Formalization and Planning Application** *AUTOMATION IN CONSTRUCTION*
  Kim, J., Fischer, M., Kunz, J., Levitt, R.
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- **Automated Generation of User Activity-Space Pairs in Space-Use Analysis** *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*
  Kim, T. W., Fischer, M.
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- **CAD-Centric Attribution Methodology for Multidisciplinary Optimization Environments: Enabling Parametric Attribution for Efficient Design Space Formulation and Evaluation** *JOURNAL OF COMPUTING IN CIVIL ENGINEERING*
  Welle, B., Haymaker, J., Fischer, M., Bazjanac, V.
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  Flager, F., Adya, A., Haymaker, J., Fischer, M.
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- **A method to automate look-ahead schedule (LAS) generation for the finishing phase of construction projects** *AUTOMATION IN CONSTRUCTION*
  Dong, N., Fischer, M., Haddad, Z., Levitt, R.
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- **A knowledge-based framework for automated space-use analysis** *AUTOMATION IN CONSTRUCTION*
  Kim, T. W., Rajagopal, R., Fischer, M., Kam, C.
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- **Determinants of residential electricity consumption: Using smart meter data to examine the effect of climate, building characteristics, appliance stock, and occupants' behavior** *ENERGY*
  Kavousian, A., Rajagopal, R., Fischer, M.
  2013; 55: 184-194
- **Application of life-cycle assessment to early stage building design for reduced embodied environmental impacts** *BUILDING AND ENVIRONMENT*
  Basbagill, J., Flager, F., Lepech, M., Fischer, M.
  2013; 60: 81-92
- **BIM-Centric Daylight Profiler for Simulation (BDP4SIM): A methodology for automated product model decomposition and recomposition for climate-based daylighting simulation** *BUILDING AND ENVIRONMENT*
  Welle, B., Rogers, Z., Fischer, M.
  2012; 58: 114-134
- **A study of virtual design and construction implementation and benefits using a bayesian approach** *REVISTA DE LA CONSTRUCCION*
  Rischmoller, L., Fischer, M., Kunz, J.
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- **A genetic algorithm-based method for look-ahead scheduling in the finishing phase of construction projects** *ADVANCED ENGINEERING INFORMATICS*
  Dong, N., Ge, D., Fischer, M., Haddad, Z.

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- **A method to compare simulated and measured data to assess building energy performance** *BUILDING AND ENVIRONMENT*
  Maile, T., Bazjanac, V., Fischer, M.
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- **Method to produce field instructions from product and process models for cast-in-place concrete operations** *AUTOMATION IN CONSTRUCTION*
  Mourgues, C., Fischer, M., Kunz, J.
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  Mehdizadeh, R., Fischer, M.
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  Senescu, R. R., Head, A. W., Steinert, M., Fischer, M. A.
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