

Curriculum vitae

Born 17/02/1978 in Jena, Germany
Civil Status married, 2 children



Academic education

- 1997 – 2003 Studies in Civil Engineering,
Focus “Construction Informatics”, Bauhaus-Universität Weimar, Germany
Diploma Degree: ”Very good“
- 2000 – 2001 Visiting student at the Department of Computer Science
of Universidad Politécnica de Madrid

Dissertation

- 2003 – 2007 Ph.D. scholarship at the Chair of Construction Informatics at the
Technical University of Munich (TUM)
- 2007 Ph. D. Doctoral dissertation on „Computer Support for Collaborative Construction
Engineering by Integration of Interactive Simulations and Spatial Databases“,
Degree “summa cum laude”

Post-Doc

- 2007 – 2011 PostDoc at the Chair of Computation in Engineering of TUM,
Head of the research group “Construction Informatics”
- 2010 Offering of the post of Full Professor for Computer Science in Civil
Engineering at Brandenburg University of Technology, Declined.

Professor Positions

- 2011 – 2012 Associate Professor (W2) for Computational Modeling and Simulation,
Technical University of Munich
- since 2012 Full Professor (W3) for Computational Modeling and Simulation,
Technical University of Munich
- since 2014 Chair of the TUM Center of Digital Methods for the Built Environment

Research Areas

Building Information Modeling, Lifecycle Management, Geometric Modeling and Processing, Point cloud processing, Spatio-temporal query languages, Construction process modelling and optimization, Linked Data, Pedestrian dynamics

Awards

- 2007 PhD Award of Technical University of Munich
- 2008 Special Award in the contest “Built on IT” by the German Ministry for Economic Affairs
- 2008 Best Paper Award of the Int. Conf. on Intelligent Computing in Engineering
- 2009 Best Paper Award of the ASCE Journal of Computing in Civil Engineering 2009
- 2010 Best Paper Award of the European Conf. on Product and Process Modeling (Coauthor)
- 2011 Best Paper Award of the Int. Conf. on Intelligent Computing in Engineering (Coauthor)
- 2013 Best Paper Award of the Int. Conf. on Civil and Building Engineering Informatics (Coauthor)
- 2014 Best Paper Award of the Int. Conf. on Computing in Civil and Building Engineering (Coauthor)
- 2014 Certificate of Excellence in Reviewing from Advanced Engineering Informatics, Elsevier
- 2016 Charles M. Eastman Top PhD Paper Award, CIB-W 78 Conference (Coauthor)
- 2018 Best Paper Award of the European Conference on Product and Process Modeling (Coauthor)

Memberships in Scientific Organizations

German Association for Computing in Civil Engineering (GACCE): Chair
European Group for Intelligent Computing in Engineering (EG-ICE): Past Chair
International Association for Automation and Robotics in Construction: Member
International Council for Research and Innovation in Building and Construction,
Working Group 78: IT in Construction (CIB-W78): Member

Editorial Boards and Expert Activities

Editorial Board, Journal for Advanced Engineering Informatics, Elsevier
Editorial Board, International Journal of 3-D Information Modeling, IGI Global
DIN working group NA 005-01-39 “Building Information Modeling”
VDI working group 2552 “Building Information Modeling”
buildingSMART International, Infra Room Standards Development

Reviewer for international Journals

Journal for Advanced Engineering Informatics, Elsevier
Journal for Computing in Civil Engineering, ASCE
Automation in Construction, Elsevier
The Computer Journal, Oxford University Press
International Journal of Geographical Information Science, Taylor & Francis
International Journal of Digital Earth, Taylor & Francis

GeoInformatica, Springer

Construction Management and Economics, Taylor & Francis

Memberships in scientific committees of international conferences

International Conference on Computing in Civil and Building Engineering, 2008 – 2018, biennial

European Conference on Product and Process Modeling, 2008 – 2018, biennial

International Workshop on Intelligent Computing in Engineering, 2009 – 2018, annual

CIB-W78- IT in Construction, 2008 – 2018, annual

International 3D GeoInfo Conference, 2010-2018, annual

CONVR - International Conference on Construction Applications of Virtual Reality, 2011 – 2017, annual

Invited Talks and Keynotes (Selection)

- “Linked Data in Roadway Management: Benefits and Limitations“, Keynote Lecture, International Conference on Intelligent Computing in Engineering, Lausanne, Switzerland, 2018
- “Open Standards for BIM–GIS interoperability”, Keynote Lecture, BuildingSMART International Summit, Paris, France, 2018
- “Building Information modeling - Digitizing the construction industry”, Keynote Lecture, Photogrammetric Week, Stuttgart, Germany, 2017
- “BIM for Infrastructure“, Keynote Lecture, International Conference on Computing in Civil and Building Engineering, Osaka, Japan, 2016
- “BIM in Infrastructure – Potentials and Challenges”, Keynote Lecture, First Munich BIM Congress, 2016
- “Building Information Modeling – Where are we? What has to be done?” Keynote Lecture, Forum Bauinformatik 2016, Berlin, Germany, 2010
- “Geometric-topological analysis of building models by space-partitioning data structures“. Seminar „Advanced Topics in Building Science“, Faculty of Architecture, Technische Universität Wien, Austria, 2011
- ”From GIS to BIM and back again: Spatial analysis in 3D“, Geomatics-Seminar of the Institute of Geodesy and Photogrammetry. Eidgenössische Technische Hochschule Zürich, Switzerland, 2010
- “Building Information Models – a sustainable basis for building lifecycle management”, Keynote Lecture, Int. Conference on Sustainability of Constructions: Integrated Approach to Life-time Structural Engineering, Izmir, Turkey, 2010
- “Construction Informatics 2010 – Challenges in Academic Research“ Keynote Lecture, Forum Bauinformatik 2010, Berlin, Germany, 2010

Visiting Scholars

- Chuck Eastman, Ph.D.
Professor, Georgia University of Technology, USA

- Ghang Lee, Ph.D.
Professor, Dept. of Architectural Engineering, Yonsei University, South Korea

- Jochen Teizer, Ph.D.
Associate Professor, Georgia University of Technology, USA
- Rafael Sacks, Ph.D.
Professor, Faculty of Civil and Environmental Engineering, Technion University, Israel
- Ioannis Brilakis, Ph.D.
Lecturer, Department of Engineering, University of Cambridge, United Kingdom
- Arto Kiviniemi, Ph.D.
Professor, School of Architecture, University of Liverpool, United Kingdom
- Zhao Xu, Ph.D.
Associate Professor, Southeast University of China, China
- Leen Seok Kang, Ph.D.
Dept. of Civil Engineering, Gyeongsang National University, Jinju, Korea

Coordination of research projects

- Co-Speaker: DFG Research Unit “Evaluation of building design variants in early phases on the basis of adaptive detailing strategies”, 2017 - 2023
- Co-Speaker: DFG Research Unit “Computer-aided collaborative planning of transport infrastructure in multi-scale 3D city and building models”, 2011 - 2017
- Project Lead: “BIMsite – BIM-based planning, simulation und monitoring of construction sites”, Bavarian Research Foundation, 2015 - 2018
- “BIM4RAIL – The BIM implementation of German Railways,”
Subproject leader: BIM-based Code Compliance Checking, 2018 – 2019
- “BIM4INFRA - Implementation of the German BIM Roadmap,” German Ministry of Transport and Digital Infrastructure, Subproject Leader: Definition of BIM 2020 scenarios, 2017 - 2019
- “ForBAU – The digital construction site,” Research cluster of the Bavarian Research Foundation, Subproject leader: “BAU-IT „Digital tool and methods“, 2008 - 2010

Research grants

Total of raised funds: 5,400,000 €, 2011 - 2018

2018 – 2021	“DeepLink - Deep Linkage between Building Information Models and Digital Drawing”, Nemetschek SE, 179.400 €
2018 – 2021	“QualiBIM – Model-based quality control for infrastructure design”, Obermeyer Planen + Beraten, 60.000 €
2018 - 2019	“BIM4RAIL – The BIM implementation of German Railways”, German Ministry of Transport and Digital Infrastructure, 100.000 €
2017 - 2019	“BIM4ROAD – BIM in roadway management and maintenance”, Federal Highway Research Institute, 114.002 €
2017 – 2020	“Integration of roadway and bridge planning”, Obermeyer Planen + Beraten, 60.000 €
2017 – 2019	“BIM4INFRA - Implementation of the German BIM Roadmap”, German Ministry of Transport and Digital Infrastructure, 200.000 €

2017 – 2020	“RIMcomb – Railway information modeling for rail infrastructure equipment”, Bavarian Research Foundation, 344.750 €
2017 – 2020	DFG Research Unit „Evaluation of building design variants in early phases on the basis of adaptive detailing strategies“, Subproject A: Representation and management of digital building models with multiple detailing levels, German Research Foundation, 236.666 €
2016 – 2019	“IFC-Bridge: Development and support of international standardization and national integration”, 394.805 €
2015 – 2019	“IFC-Rail and IFC-Road: Development and support of international standardization and national integration”, 247.860 €
2016 – 2018	“Linked Data for Road Management”, Federal Highway Research Institute, 207.719 €
2016 – 2018	“Scientific analysis of the BIM pilot projects of BMVI”, German Ministry of Transport 59.620 €
2015 – 2018	“BIMsite – BIM-based planning, simulation und monitoring of construction sites”, Bavarian Research Foundation, 413.300 €
2011 – 2017	DFG Research Unit „Computer-aided collaborative planning of transport infrastructure in multi-scale 3D city and building models“, Subproject B: Multi-scale methods in 3D city and building models, 504.000 €
2015 – 2017	“SEEBridge – Semantical Enrichment Engines for Bridges”, International Project, Infravation Program, European Union, 99.373 €
2015 – 2017	“Feasibility study: BIM for operation and maintenance of concrete bridges”, Federal Highway Research Institute, 46.410 €
2015 – 2017	“IFC-Infra Overall Architecture“, buildingSMART International, 38.000 €
2014 – 2016	“Development of IFC-Alignment”, buildingSMART International, 44.896 €
2014 – 2017	“VCCL - Visual Code Compliance Checking Language”, Nemetschek SE, 124.800 €
2013 - 2016	BMBF research cluster MultikOSi - Decision Support Systems for Public Events Subproject “Multi-scale pedestrian dynamics ”860.000 €
2013 – 2016	DFG project „Development of an automated procedure for construction progress monitoring based on point cloud interpretation and 4D BIM modeling“, German Research Foundation, 257.160 €
2012 – 2015	“FAUST – Process simulation of construction sites in special underground construction”, Bavarian Research Foundation, 210.900 €
2011 – 2014	„Spatio-temporal query language for checking and analyzing 4D building models”, German Research Foundation, 252.000 €
2011 – 2012	“3D-based life-cycle management of bridges”, Central Innovation Program SME (ZIM), 158.058 €
2011 – 2013	„Analysis and Conception of modular system model“, Federal Highway Research Institute (BAST), 180.000 €

Teaching

Bachelor Level

- Computational Modeling of Products and Processes (since Summer Term 11): Lecture
- Engineering Databases (since Winter Term 08/09): Lecture

Master Level

- Introduction to Programming in C/C++ (Winter Term 04/05): Lecture
- Building Information Modeling (since Winter Term 11/12): Lecture
- Bau- und Umweltinformatik (since Summer Term 2007): Lecture
- Parallel Computing (Summer Terms 2004 and 2005): Lecture
- Software Lab (since Winter Term 11/12): Interactive course

Supervised PhD Students (completed)

- Simon Daum: Conception of a spatio-temporal query language for the analysis and verification of 4D building information models, 2018
- Javier Ramos Jubierre: Methods for consistency-preserving multi-scale product models in infrastructure, 2017
- Peter Michael Kielar: Cognitive Modeling and Computational Simulation of Spatial-Sequential Destination Choice of Pedestrians, 2017
- Maximilian Bügler: Reactive Simulation of Shoring and Excavation Processes based on Automated Performance Monitoring, 2016
- Gergö Dori: Simulation-based determination of buffer time and schedule optimization in construction, 2016
- Yang Ji: Integrated road and bridge planning based on a holistic parametric 3D infrastructure model, 2014
- Angelika Kneidl: Methods for modelling human wayfinding behavior in the context of microscopic pedestrian simulation models, 2013
- Katharina Lukas: Optimization of Maintenance Schedules for Urban Infrastructure Based on Meta-Heuristics, 2013

Supervised PhD Students (ongoing)

- Julian Amann: An object-oriented language for embedding interpretation semantics in digital building models, submitted.
- Daniel Biedermann, Dynamic approaches for multiscale modeling of pedestrian dynamics, submitted.
- Jimmy Abualdenien
- Alexander Braun
- Felix Eickeler
- Sebastian Esser
- Marco Häußler

- Katrin Jahr
- Štefan Markič
- Maciej Trzeciak
- Simon Vilgertshofer

Supervised Master Theses

1. Esser, S.: Implementierung einer Datenschnittstelle zur Unterstützung der modellbasierten Planung von Bahnausrüstungstechnik, Master's Thesis, 2018
2. Barth, A.: Development of an integrated data management in civil engineering with the help of methods of the Systems Engineering, Master's Thesis, 2018
3. Reichle, Johannes: Anwendungspotentiale von BIM im Bauprozessmanagement, Master's Thesis, 2018
4. Hinterschweifinger, J.: BIM-gestütztes Anforderungsmanagement zur Kalkulation eines Hochbauprojektes, Bachelor's Thesis, 2018
5. Zibion, D.: Development of a BIM-enabled Software Tool for Facility Management using Interactive Floor Plans, Graph-based Data Management and Granular Information Retrieval, Bachelor's Thesis, 2018
6. Forth, K.: BIM-basierte Ökobilanzierung, Master's Thesis, 2018
7. Wang, Y.: Analysis of Code and Guideline Contents in Construction Industry based on Text Mining, Bachelor's Thesis, 2017
8. Schwab, Benedikt: Automated Driving: Analysis of Standard-Setting Dynamics and Development of a Pedestrian Simulation Model, Bachelor's Thesis, 2017
9. Bareth, Thomas: Baudimensionierung hinsichtlich Fluchtwegesicherheit und Komfort – eine Betrachtung von ingenieurtechnischen Berechnungsmethoden vor dem Hintergrund der baurechtlichen Vorschriften, Master's Thesis, 2017
10. Koehler, K.: Untersuchung der IFC-gestützten Modellübertragung zur Ableitung von Modellierempfehlungen für Architekten, Master's Thesis, 2017
11. Vega, S.: Analysis of BIM-based Collaboration Processes in the Facility Management, Master's Thesis, 2017
12. Lahr, S.: Durchführung einer mikroskopischen Personenstromanalyse zur Optimierung und Evaluation der Abläufe, von Umbaumaßnahmen des Münchner Hauptbahnhofes, Master's Thesis, 2017
13. Sun, Jingxing: Untersuchung der BIM-basierten Arbeitsweise im Verkehrswegebau eingebettet in die Planungsphase, Bachelor's Thesis, 2017
14. Hudeczek, D.: Formalisierung von Normen mithilfe von Auszeichnungssprachen für die automatisierte Konformitätsüberprüfung, Master's Thesis, 2017
15. Lauterbach, Sven: Performanceoptimierung von Fußgängersimulationen durch Einsatz von Parallelisierungstechniken, Master's Thesis, 2017
16. Iqbal, M.: Advanced Topological Operators for QL4BIM, Master's Thesis, 2016
17. Mini, F.: Entwicklung eines LoD Konzepts für digitale Bauwerksmodelle von Brücken und dessen Implementierung, Master's Thesis, 2016
18. Kunkel, H.: Digitales Bauen - Integration von projektorientierten Informationssystemen im schlüsselfertigen Hochbau, Master's Thesis, 2016
19. Marx, M.: Computergestützter Optimierungsprozess zur Unterstützung der Entscheidungsfindung in der frühen Entwurfsphase am Beispiel eines nachhaltigen Museumsgebäudes, Master's Thesis, 2016
20. Cheng, Zhibin: Modelling Pedestrian Group Behaviors on a Music Festival Event Using an Agent-based Method, Master's Thesis, 2016
21. Prasad, R.; : Betrachtung und Analyse des Projektmanagements im BIM-gestützten Bauprozess, Master's Thesis, 2016
22. Seeser, E.: Entwicklung eines Add Ins basierend auf Siemens NX zum Datenaustausch in die CADINP Sprache von SOFiSTiK, Master's Thesis, 2015
23. Sojka, Frédéric: Integration des Building Information Modelling in den Wertschöpfungsprozess eines mittelständischen Bauunternehmens, Master's Thesis, 2015
24. Schneider, Michael: Einführung der BIM-Methode im Ingenieurbüro – Unterstützung der Abläufe durch eine durchgängige Nutzung einer Bauteilbibliothek, Master's Thesis, 2015

25. Faure, Julien: Vergleich und Bewertung von Analysewerkzeugen für die Validierung und Kalibrierung von mikroskopischen Personenstrommodellen, Master's Thesis, 2015
26. Singer, D.: Entwicklung eines Prototyps für den Einsatz von Knowledge-based Engineering in frühen Phasen des Brückenentwurfs, Master's Thesis, 2014
27. Hölderle, B.: Untersuchung von Autodesk Vault für den BIM-Prozess, Master's Thesis, 2014
28. Vilgertshofer, S.: Repräsentation und Detaillierung parametrischer Skizzen mit Hilfe von Graphersetzungssystemen, Master's Thesis, 2014
29. Preidel, C.: Entwicklung einer Methode zur automatisierten Konformitätsüberprüfung auf Basis einer graphischen Sprache und Building Information Modeling, Master's Thesis, 2014
30. Weinholzer, M.: Analyse und Implementierung von Datenaustauschformaten zwischen CAD- und AVA-Systemen im Zuge einer BIM-basierten Projektrealisierung im Ingenieurbau, Master's Thesis, 2014
31. Büchele, D.: Visualisierung von Fußgängersimulationsdaten auf Basis einer 3D-Game-Engine, Master's Thesis, 2014
32. Kutterer, B.: Computergestützte Tragwerksplanung im Holzbau, Master's Thesis, 2014
33. Frank, J.: Realistische Echtzeit-Visualisierung von CFD-Ergebnissen, Master's Thesis, 2014
34. Hua, Shan: Entwicklung einer Schnittstelle zwischen IFC-Gebäudemodellen und Modelica, Master's Thesis, 2014
35. Kuloyants, V.: Entwicklung eines IFC-basierenden Datenaustauschstandards für den Unterbau von Brückenbauwerken, Master's Thesis, 2014
36. Nasirov, Vladislav: Building Information Models als Input für energetische Gebäudesimulation, Master's Thesis, 2013
37. Hofmeier, M.: Entwicklung einer Software zur Soll/Ist-Bauablaufvisualisierung mit IFC-Schnittstelle, Master's Thesis, 2013
38. Braun, A.: Entwicklung eines 4D-BIM-Viewers mit graphbezogener Darstellung von Bauabläufen und - alternativen, Master's Thesis, 2013
39. Wang, M.: 3D-Planung von Brückenbauwerken mit Siemens NX 7.5, Master's Thesis, 2012
40. Andrae, M.: Entwicklung eines Mangelaufnahme-Systems auf Mobilen Geräten für den Einsatz bei der Objektüberwachung zur weiteren zentralen Verarbeitung, Master's Thesis, 2012
41. Solis Lopez, J.M.: Calculation and representation of structural reinforcement in Building Information Models using Revit Structure and SOFiSTiK, Master's Thesis, 2011
42. Ritter, F.: Untersuchung der Möglichkeiten und Vorteile des modellgestützten kooperativen Planens anhand von Autodesk Produkten, Master's Thesis, 2011
43. Zhang, Y.: Genetic Algorithms for Bridge Maintenance Scheduling, Master's Thesis, 2010
44. Zhou, H.: Development of an Earthwork Simulation Model with Plant Simulation, Master's Thesis, 2010
45. Lu, Y.: Development of the 4D Earthwork ViZ Toolkit Applied in Road Construction, Master's Thesis, 2009
46. Ramos Jubierre, J.: Analysis and coupling of a Geometric Constraint Solver with a CAD application, Master's Thesis, 2009

Supervised Bachelor Theses

1. Stoitchkov, D.: Analysis of Methods for Automated Symbol Recognition in Technical Drawings, Bachelor's Thesis, 2018
2. Oelfe, Stephan: Parametrische Konstruktion von Systemparkhäusern mit Hilfe von Grasshopper 3D und Tekla Structures, Bachelor's Thesis, 2018
3. Roque Costa, Luis Miguel: Grundlagen der Baustelleneinrichtungsplanung am Beispiel von Containeranlagen, Bachelor's Thesis, 2018
4. Luginger, L.: BIM-gestützte Simulation und Validierung einer Bauablaufplanung, Bachelor's Thesis, 2018
5. Pfuhl, S.: Analysis of Exchange Requirements for BIM-based Fire Code Compliance Checking, Bachelor's Thesis, 2018
6. Müller, B.: Machine Learning - based Image Segmentation, Bachelor's Thesis, 2018
7. Raidl, C.: 3D-Modellierung von Brückenbauwerken mit Autodesk Revit und Erweiterung um IFC4x1 Entitäten, Bachelor's Thesis, 2018
8. Holzinger, R.: 3D-Modellierung von Bahninfrastruktur, Bachelor's Thesis, 2018
9. Oppold, B.: Bewertung und Optimierung von Methoden zum automatisierten Soll-Ist-Abgleich unter Betrachtung gültiger Bauabweichungen, Bachelor's Thesis, 2018

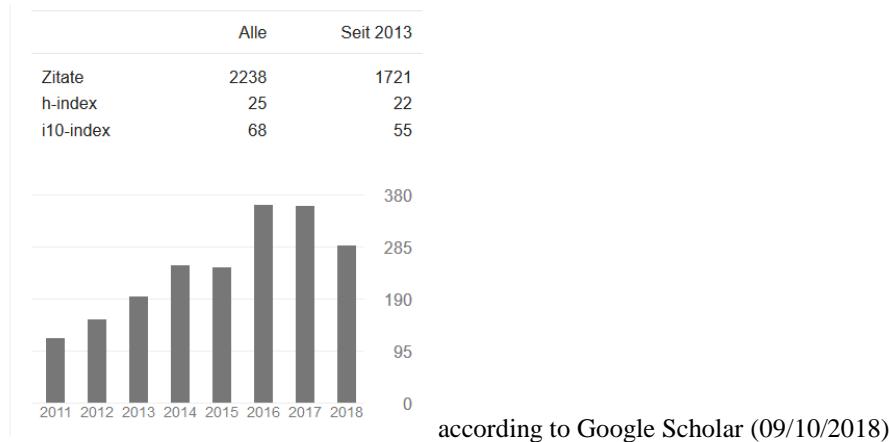
10. Bulla, J.: Definition der IFC-Modellinhalte von Infrastrukturbauwerken mithilfe von Autodesk Revit, Bachelor's Thesis, 2018
11. Rampf, F.: Development of an IFC Alignment Import/Export Plug-in for Autodesk AutoCAD Civil 3D, Bachelor's Thesis, 2017
12. Nguyen, Thu: 3D-Bestandsscanning eines Mehrfamilienhauses als Grundlage für eine energetische Bewertung, Bachelor's Thesis, 2017
13. Rostek, Michael: Evaluierung von Messgeräten zur Detektion von Fußgängerströmen, Bachelor's Thesis, 2017
14. Schirmer, S.: Teilautomatisierte Modellierung von Baubehelfen und Konstruktionsmaterial, Bachelor's Thesis, 2017
15. Germscheid, Sonja: Implementierung, Analyse und Evaluierung der Erweiterung des Social Force Models für wartenden Fußgänger, Bachelor's Thesis, 2017
16. Lukas, A: Datenerfassung mittels unbemannter Flugobjekte im Hinblick auf eine automatisierte Baufortschrittskontrolle, Bachelor's Thesis, 2017
17. Altvater, D.: Parametrische Tunnelmodellierung in Autodesk Inventor zur Erstellung von IFC-Modellen, Bachelor's Thesis, 2017
18. Kaps, C: BIM-gestützte Modellierung von Baubehelfselementen, Bachelor's Thesis, 2017
19. Kruse, A: BIM-Integriertes Lean Management und BIM-gestützte Ausbau-/Fassadenmodellierung in Autodesk Revit, Bachelor's Thesis, 2017
20. Hecht, Helge: A GPU Based Approach for As-Planned versus As-Built Comparison in the Scope of Automated BIM Based Construction Progress Monitoring, Bachelor's Thesis, 2016
21. Ickstadt, Carolin: Analyse der Level of Development und des modellgestützten Datenaustausches mit IFC-Dateien anhand der Modellierung eines Parkhauses, Bachelor's Thesis, 2016
22. Esser, S.: Experimentelle Methoden zur Skalenbestimmung von Personenströmen, Bachelor's Thesis, 2016
23. Stauch, F.: Untersuchung der parametrischen Modellierung von Bogenbrücken aus Beton mit Dynamo und Revit, Bachelor's Thesis, 2016
24. Sedlmair, M.: Auswirkungen von Änderungen im Bauablauf auf den Prozessplan und Entwicklung einer Terminanpassungs-Software, Bachelor's Thesis, 2016
25. Rösch, M.: Eine Zustandsanalyse von Building Information Modeling im Tiefbau, Bachelor's Thesis, 2016
26. Rohne, Melina: Implementierung einer U-Bahn-Station in Autodesk Revit für den Einsatz in Personenstromsimulationen, Bachelor's Thesis, 2016
27. Mehlstäubler, K.: Analyse von Datenaustauschprozessen zur BIM- gestützten Energiesimulation, Bachelor's Thesis, 2016
28. Kohl, B.: Nutzung interdisziplinärer Produktmodelle in einem Building Information Model – Untersuchung anhand des Inventor-Revit-Interoperability Tools, Bachelor's Thesis, 2016
29. Templeton, K.: Analyse von Überprüfungswerkzeugen der inhaltlichen Korrektheit von BIM-Modellen, Bachelor's Thesis, 2016
30. Thieme, Christian: Implementierung einer Sensorik für virtuelle Fußgänger im Kontext der agentenbasierten Modellierung und Simulation, Bachelor's Thesis, 2016
31. Beck, S.: Qualitätsanalyse der Datenaustauschprozesse in der BIM-gestützten Tragwerksplanung, Bachelor's Thesis, 2016
32. Ehrecke, Leo: Examination of the Professional Support for a Major Public Event, Bachelor's Thesis, 2016
33. A., Ahmad: Implementierung der BIM-Methode aus Sicht des Projektmanagements, Bachelor's Thesis, 2016
34. Rohrmann, J.: Optimierte BIM-Modellierung zur Unterstützung der automatisierten Baufortschrittskontrolle, Bachelor's Thesis, 2016
35. Tadesse, R.: BIM-basierte Auswertung von Bestandsbauten mit Hilfe von Visual Programming, Bachelor's Thesis, 2016
36. Schwiebacher, J.: Berechnung von Fußgänger Ruhezonen mittels Visibility Graph Analysis für Personenstromsimulationen, Bachelor's Thesis, 2016
37. Mösch, J.: Vergleich von offenen und geschlossenen Schnittstellen in der BIM-basierten Tragwerksplanung, Bachelor's Thesis, 2016
38. Dietl, M.: Analyse von BIM-basierten Kollaborationswerkzeugen, Bachelor's Thesis, 2015
39. Braunert, W.: Erstellung einer 4D-Bauablaufsimulation auf Grundlage von 2D, Bachelor's Thesis, 2015

40. Schwab, M.: Punktwolkengestützte Modellierung eines Bestandsgebäudes in Autodesk Revit, Bachelor's Thesis, 2015
41. Barth, A.: Webbasierte Prozessvisualisierung mit Hilfe eines 4D Modells, Bachelor's Thesis, 2015
42. Kostka, K.: Bauteilidentifikation mit GUIDs in Autodesk Revit, Bachelor's Thesis, 2015
43. Bulik, A.: Entwicklung einer effizienten Visualisierungsmethodik für IFC-basierte Gebäudemodelle, Bachelor's Thesis, 2015
44. Gun, S.: BIM-basierte statische Analyse am Beispiel der TU Mensa, Bachelor's Thesis, 2015
45. Schön, Anian Felix: Analyse der BIM Software Revit 2015 am Beispiel der Fakultät für Mathematik und Informatik der TU München, Bachelor's Thesis, 2015
46. Hepf, C.: Analyse der BIM-Software Revit Architecture 2015 anhand der Modellierung des Gebäudes der Fakultät für Maschinenwesen der TU München in Garching, Bachelor's Thesis, 2015
47. Meier, A.: Analyse des modellgestützten Datenaustausches anhand der Modellierung eines Gebäudes der TU München mit Revit 2015, Bachelor's Thesis, 2015
48. Schweizer, R.: Spatial BIM Queries: A Comparison Between CPU and GPU Based Approaches, Bachelor's Thesis, 2015
49. Portz, M.: Analyse der Datenaustauschprozesse zwischen BIM-fähigen Modellierungs- und Fußgängersimulationswerkzeugen am Beispiel von Nemetschek Allplan und PTV Viswalk, Bachelor's Thesis, 2015
50. Nitschke, C.: Die Umsetzung von BIM im Ingenieurbau anhand von Brückenmodellen, Bachelor's Thesis, 2015
51. Hözlwimmer, V.: Analyse des Datenaustausches zwischen dem Modellierungs- und AVA-Prozess auf Basis von Building Information Modeling, Bachelor's Thesis, 2015
52. Obiols, J.: Analysis and development of a BIM-based workflow in Structural Engineering, Bachelor's Thesis, 2015
53. Schwietert, K.: Parametrische Modellierung des Ostbahnhofs München unter Verwendung eines neutralen prozeduralen Modells, Bachelor's Thesis, 2014
54. Miedel, F.: Modellierung des Stadtbahntunnels Augsburg mit Hilfe von Siemens NX 9, Bachelor's Thesis, 2014
55. Brill, M.: Modellierung und kollaboratives Arbeiten mit aktueller BIM-Software am Beispiel des Forschungszentrums TranslaTUM, Bachelor's Thesis, 2014
56. Boettcher, B.: Vergleich von Laserscanning und Photogrammetrie am Beispiel der Validierung von Schweißarbeiten im Lokomotivbau, Bachelor's Thesis, 2014
57. Dimov, G.: Analysis of Revit 2014 based on the Modeling of a TUM Building, Master's Thesis, 2014
58. Raps, Anna: Modellierung von Komponenten einer Windenergieanlage in DYMOLA/MODELICA: Lagermodellierung, Bachelor's Thesis, 2014
59. Kunkel, H.: Einbindung von Evakuierungssimulation in den Bauplanungsprozess am Beispiel der CAD-Pläne der zweiten S-Bahn Stammstrecke München, Bachelor's Thesis, 2013
60. Schnell, D.: Modellierung des Gebäudes 7 der TUM mit Autocad Revit 2014, Bachelor's Thesis, 2013
61. Vega Völk, S.T.: TUM Surrounding Area - 3D Modeling with Autodesk Infrastructure Modeler, Bachelor's Thesis, 2013
62. Fiermonte, M.: Automatisierte Planableitung anhand einer parametrischen Brückenmodells mit Autodesk Inventor, Bachelor's Thesis, 2013
63. Roemer, F.: Parametrische 3-D Modellierung von Brückenbauwerken mit Autodesk Inventor, Bachelor's Thesis, 2013
64. Sojka, F.: 3D Parametrischer Tunnelentwurf am Beispiel der zweiten S-Bahn Stammstrecke München, Bachelor's Thesis, 2013
65. Nguyen, M.: Erweiterung einer web-basierten Postvisualisierung zur Darstellung und Analyse von Fußgängersimulationsergebnissen, Bachelor's Thesis, 2012
66. Shrestha, M.: Szenario-Management für die Bauablaufsimulation, Bachelor's Thesis, 2012
67. Driesel, M.: Simulation von Evakuierungsszenarien bei Grossveranstaltungen am Beispiel eines Gebäudes der TU München, Bachelor's Thesis, 2012
68. Ferataj, S.: Abbildung von Schädigungsmechanismen für Betonbrücken, Bachelor's Thesis, 2012
69. Poertge, D.: Aufbereitung von Laserscandaten zur Berechnung überregionaler Hochwasserszenarien, Bachelor's Thesis, 2012

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