Curriculum Vitae Fall 2015 ANDERS HOLDEN DELEURAN MSc.Eng/Cand.Polyt.Architecture & Design

> Address: Amagerbrogade 136, 4 2300 Copenhagen, Denmark Phone: +4542795221 Mail: andersdeleuran@outlook.com Web: andersholdendeleuran.com



Employment CITA - Centre for Information Technology and Architecture PhD Fellow

The PhD project extends the interdisciplinary Sapere Aude funded "Complex Modelling" project specifically researching integrative development strategies for nonlinear computational design models. The project is supervised by Professor Mette Ramsgaard Thomsen (KADK) and Professor Mark Pauly (EPFL). Feb 2014-Present, Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark

Aedas Architects - Research & Development Group Computational Designer

Developer on competition and commissioned projects: computational modelling, spatial analysis and automation. Introduced Python/Grasshopper to the group, established internal development blog/wiki. Projects: Polish Embassy, RIBS, Doha Metro, GEMS, Euston Crossing, French School, Green Block Astana. Jul 2011-Feb 2014, Stockholm, Sweden and the Aedas London Office, United Kingdom

CITA - Centre for Information Technology and Architecture Research Assistant

Researcher and designer on projects exploring advanced modelling and material behaviour. Introduced Maya/Nucleus across the CITA team, teaching and dissemination, online presence and marketing. Projects: Persistent Model Nr.1, DevA, Distortion, Thaw, Dermoid, Reef, Designing with Deformation. Dec 2009-May 2011, Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark

Education Master of Science in Engineering in Architecture & Design

Department of Architecture, Design & Media Technology, Aalborg University 2005-2008, Aalborg, Denmark

Advanced Design Visualization Course

Umeå Institute of Design, Umeå University 2006-2007, Umeå, Sweden

Bachelor of Science in Engineering in Architecture & Design

Department of Architecture, Design & Media Technology, Aalborg University 2002-2005, Aalborg, Denmark

Freelance White Architects - Dsearch Group Computational Design Consultant

Consulting on programming and development, specifically under IronPython for Rhino/Grasshopper Oct 2015 -Present, Stockholm/Gothenburg, Sweden

CITA & RMIT Spatial Information Architecture Laboratory Designer/Developer Part of the core design and development team on the ongoing "Dermoid" series of installations 2011-2013, KADK, Copenhagen, Denmark and RMIT University, Melbourne, Australia

Philip Beesley Architects & CITA Exhibition Designer/Manager

Project management and maintenance of the Sargasso Fields and Sargasso Cloud installations Sep-Dec 2009, Pluto Festival, Opwijk, Belgium and COP15 Climate Summit, Copenhagen, Denmark

JAJA Architects & Shift Control Digital Designer

Behavioural flow/flocking simulation and visualization on Nørreport Station competition June 2009, Copenhagen, Denmark

Søren Robert Lund Architects Visualization Specialist Rendering and 3D modelling on aquarium competition Dec 2008, Copenhagen, Denmark

NoRA - Venice Biennale Pavilion Team Designer/Visualisation Specialist Concept and design development, 3D modelling and visualization, fabrication strategies, realization Sep 2005-Aug 2006, Aalborg University, Aalborg, Skagen, Denmark, Venice, Italy

Struer Museum & KPF Arkitekter Visualization/Graphic Designer 3D modelling and rendering for extension and renovation of Struer Museum 2004-2005, Struer, Denmark

Teaching Architectural Association - Aarhus Visiting School Tutor/Developer

Co-led the "Rethinking Patterns" summer school for students and professionals Aug 2015, Aarhus School of Architecture, Aarhus, Denmark

Institute of Technology in Architecture - ETH Zurich Guest tutor Co-led workshop presenting the ShapeOp framework for NCCR members April 2015, ETH Zurich, Switzerland.

Academy for Architectural Culture - Gerkan, Marg and Partners Architects Tutor/Developer Co-led the "Amphibious Hamburg Research Lab" summer school for students and professionals June-July 2014, Academy for Architectural Culture, Hamburg, Germany

CITA, IAAC and UDK Tutor/Developer

Co-taught CITA/IAAC master students in "New Hybrids" workshop with UDK/KET, Christoph Gengnagel March 2014, Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark

SIAL/RMIT University Guest Lecturer

Led workshop on complex modelling for master/Phd students, post grads and professionals May 2013, Design Research Institute, RMIT University, Melbourne, Australia Curriculum Vitae Fall 2

Curriculum Vitae Fall 2015 TU Delft - Hyperbody Research Group Guest Lecturer

ANDERS HOLDEN DELEURAN Led workshop on urban and architectural qualities of movement and visibility structures MSc.Eng/Cand.Polyt.Architecture & Design Nov 2011, Architecture Faculty, Delft University of Technology, The Netherlands

KTH - School of Architecture External Lecturer Co-taught course on representation in an urban context to third year students Sep 2011-Jan 2012, Royal Institute of Technology, School of Architecture, Stockholm, Sweden

CITA - Royal Danish Academy of Fine Arts, School of Architecture Assistant Lecturer Co-taught master students in four workshop studios as part of Mark Burry guest professorship 2010-2011, Royal Danish Academy of Fine Arts, School of Architecture, Copenhagen, Denmark

Department of Architecture, Design & Media Technology External Lecturer Head of Digital Maps master course in 3D modelling, rendering, post production etc. Jan-Mar 2009, Aalborg University, Aalborg, Denmark

Department of Architecture, Design & Media Technology Guest Lecturer Head of advanced rendering, compositing and post production to master students Sep-Oct 2008, Aalborg University, Aalborg, Denmark

Designing and Inhabiting Virtual Environments Teaching Assistant/Group Leader Led and co-taught student group as part of Digital Design conference and workshop Jul 2008, Faculty of Architecture, University of Ljubljana, Slovenia

Department of Architecture, Design & Media Technology Teaching Assistant Assistant on first year course in 3D modelling, animation and rendering Feb-May 2005, Basis year education, Aalborg University, Denmark

Publications Hybrid Tower, Designing Soft Structures Co-Author

Proceedings of Design Modelling Symposium 2015: Modelling Behaviour Oct 2015, Copenhagen, Denmark

ShapeOp - A Robust and Extensible Geometric Modelling Paradigm Co-Author Proceedings of Design Modelling Symposium 2015: Modelling Behaviour Oct 2015, Copenhagen, Denmark

Designing CNC Knit for Hybrid Membrane and Bending Active Structures Co-author Proceedings of Textile Composites and Inflatable Structures: Structural Membranes 2015 Oct 2015, Barcelona, Spain

The Tower: Modelling, Analysis and Construction of Bending Active Tensile Membrane Hybrid Structures Lead Author, Proceedings of the International Association for Shell and Spatial Structures Symposium 2015 Aug 2015, Amsterdam, The Netherlands

Synthesizing a Nonlinear Modelling Pipeline for the Design of Masonry Arch Networks Lead Author Publication of the Utzon(X) Architecture Summer School 2014 (yet to publish) April 2015, Aalborg University, Aalborg, Denmark

Empathic Space: The Computation of Human-Centric Architecture Contributor Architectural Design (AD) reader, guest editors: Christian Derix, Åsmund Izaki Sep 2015

The Challenge of the bespoke - Design, Simulation and Optimisation of a Computationally Designed Plywood Gridshell Co-Author

Proceedings of eCAADe 2014 - Fusion: Data integration at its best Sep 2014, Northumbria University, Newcastle UK

Topological Infrastructure Analysis of the Built Environment Lead Author **Proceedings of EAEA11** 2012. Environment Architecture: Design Evolution. Comm

Proceedings of EAEA11 2013 - Envisioning Architecture: Design, Evaluation, Communication Sep 2013, Politecnico di Milano, Milan, Italy

A New Material Practice: Integrating Design and Material Behavior Co-Author Proceedings of the 2012 Symposium on Simulation for Architecture and Urban Design May 2012, San Diego, CA, United States of America

Process Through Practice: Synthesizing a Novel Design and Production Ecology Co-Author Proceedings of ACADIA 12: Synthetic Digital Ecologies Jan 2012, San Francisco, United States of America

Designing with Deformation: Sketching Material and Aggregate Behaviour of Actively Deforming Structures Lead Author

Proceedings of the 2011 Symposium on Simulation for Architecture and Urban Design Apr 2011, Boston, MA, United States of America

 Software
 3D Modelling Rhino, Revit, 3ds Max, Maya, AutoCAD, Rendering Mental Ray, VRay, Cycles

 Computational Modelling Grasshopper, RhinoCommon, GHPython, Kangaroo, Ladybug, Karamba etc.

 Programming Python, IronPython, C#, .NET, Java, Dot, IDE Sublime Text, Visual Studio, GIT SourceTree

 Graphic Design Photoshop, Illustrator, DTP Indesign, LaTeX TexMaker, Reference Mendeley

 Video After Effects, Premiere Pro, CamStudio, Handbrake, Virtual Dub, Web WordPress, Cargo

Misc Languages Fluent in spoken and written Danish and English, conversational Norwegian and Swedish, basic understanding of German

Drivers License Danish B-Class

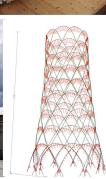
Research Portfolio Fall 2015 ANDERS HOLDEN DELEURAN MSc.Eng/Cand.Polyt.Architecture & Design

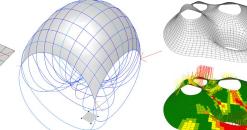


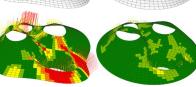












Rethinking Patterns

AA/AARCH 2015

Developer and tutor for the first AA Visiting School in Denmark, exploring lighting and environmental analysis, mesh decomposition and planar fabrication strategies.

With: Jens Pedersen, Dave Reeves, Ali Farzaneh, Guests: Daniel Piker, Michael Weinstock, Andreas Eggertsen

Hybrid Tower

CITA/KET/UDK 2014-2015 Developer of computational design modelling pipeline for form finding, analysis and fabrication. Also heavily involved in design detailing and construction of the 10 meter tall bending active membrane hybrid tower

With: Mette Ramsgaard Thomsen, Martin Tamke, Christoph Gengnagel, Michel Schmeck, Ida Katrine Friis Tinning, Greg Quinn

ShapeOp

LGG/EPFL 2014-2015 GHPython developement, component software design and implementation of the unified geometry processing C++ framework for modelling and optimization under constraints.

With: Mario Deuss, Bailin Deng, Sofien Bouaziz, Mark Pauly

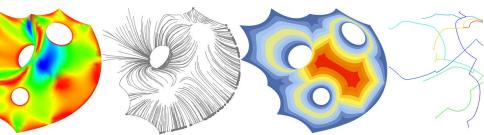
Utzon(X) Pavilion

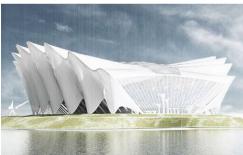
Aalborg University 2014 Development of a modelling pipeline for for the design and optimization of masonry arch networks in the context of the Utzon(X) summer school.

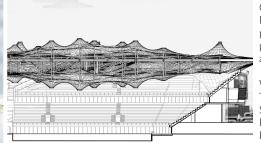
With: David Stasiuk, Isak Worre Foged, Mads Brath

MeshAnalysis 2014-

Ongoing development of a series of open source mesh analysis algorithms written in GHPython/RhinoCommon/NetworkX.



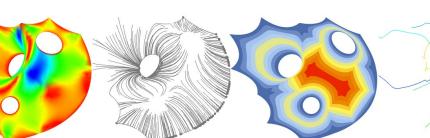




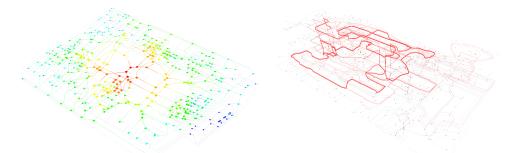
Amphibious Hamburg

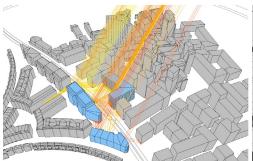
CITA/AAC/GMP 2014 Developed computational modelling pipelines and tutored for a summer school proposing designs for an aquatic centre for a Hamburg summer Olympics bid.

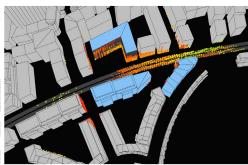
With: Mette Ramsgaard Thomsen, Martin Tamke, David Stasiuk, Enno Maas, Annika Schröder, Johann von Mansberg, Sven Plieninger, Daniel Gebreiter, Guests: Daniel Piker, David Rutten

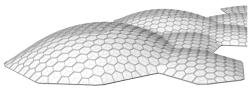


Research Portfolio Fall 2015 ANDERS HOLDEN DELEURAN MSc.Eng/Cand.Polyt.Architecture & Design







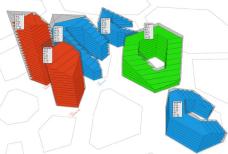
















Resilient Infrastructure and Building Security

Aedas Architects 2011-2013 Developed a suite of tools for performing topological infrastructure analysis of the built environment. Including extracting medial representations and running graph theoretical measures on these.

With: Christian Derix, Åsmund Izaki

Earls Court Glare Study

Aedas Architects 2013 Developed a software tool implemented for determining whether new developments along a train track would reflect sunlight and generate glare intersecting with the critical field of view of train drivers travelling in both directions.

With: Christian Derix

Green Block Astana II

Aedas Architects 2013 Developed a modelling pipeline for generating and form finding biodomes and estimating their cost.

With: Christian Derix, Lucy Helme, Kim Lodge, Mike Oades

Green Block Astana I

Aedas Architects 2013 Developed a dynamic massing tool which generates massings based on a list of values that can be manipulated in the Rhino viewport and/or optimized using Grasshopper.

With: Christian Derix, Prarthana Jagannath, Kim Lodge, Mike Oades

Dermoid Series

CITA/SIAL/UDK 2010-2013 Developer and designer on all iterations, responsible for computational design with a primary focus on form finding, geometrical modelling and assembly.

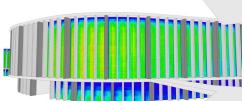
With: Mark Burry, Martin Tamke, Mette Ramsgard Thomsen, Phil Ayres, Aron Fidjeland, Stig Anton Nielsen, Tore Banke, Jacob Riiber, Jane Burry, Daniel Davis, Alexander Pena, Michael Wilson

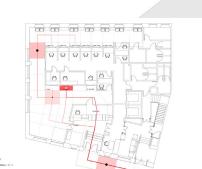
Sabic

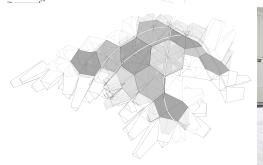
Aedas Architects 2013 Developed a modelling pipeline for packing and dimensioning facade openings on a concrete shell informed by yearly solar radiation.

With: Christian Derix, Kim Lodge

Research Portfolio Fall 2015 ANDERS HOLDEN DELEURAN MSc.Eng/Cand.Polyt.Architecture & Design



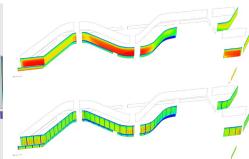


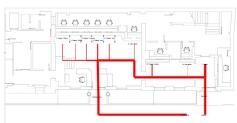


















GEMS American Academy

Aedas Architects 2012 Developed a modelling pipeline for performing yearly solar radiation analysis and optimizing a static sun shading system based on this environmental design criteria.

With: Christian Derix

Polish Embassy London

Aedas Architects 2011 Developed a bespoke and interactive occupancy simulation software which projects and predicts the performance of the new embassy building based on data gathered at the old one.

With: Åsmund Izaki, Christian Derix

Distortion

CITA, RPI 2010 Developed a computational modelling pipeline which shape the pavilion under inverse gravity, simulate their collision and link this assembly with downstream fabrication models.

With: Martin Tamke, Brady Peters, Niels Andersen, Ali Tabatabai, Reese Campbell, Demetrios Comodromos, David Stasiuk

Thaw/Thicket CITA 2010

Developed computational design models which simulate the bending, torsion, collision and friction of an aggregate weaved structure made from wooden slats.

With: Mette Ramsgaard Thomsen, Karin Bech, Kristine Agergaard Jensen, Aron Fidjeland

Persistent Model #1

CITA 2009-2010 Developed computational design models which simulate the material behaviour of inflating single and aggregated steel cushions.

With: Phil Ayres

Reef CITA 2010

Developed computational design models which simulate "electro-mechanically active polymers" for creating self-organizing responsive components with embedded actuation.

With: Aurélie Mossé