

**BACKGROUND & FOCUS**

Born in Norway in 1972. Grew up in Sweden.

An early fascination by the experiences and environments created for theatre led me to start designing costumes and sets. This led on to working with metal as well as creating events and experience-spaces for people. From there I went on to do interior design and architectural work, first as an assistant, later as a freelance and finally as a 3D CAD specialist for others.

I worked as a freelance Creative Director and Project Manager between 1995 and 2002. Designing, developing and building interior and exterior space applied in the fields of commercial and private interiors, theatre, film and TV set design and architecture. Since 2002 I have focused more on computational geometry and CAD tools, using computers as primary means of expression.

My current research interests include studying how collaborative process- and information-flow modelling across organizations in building-consortia can make design development more efficient and how to make better use of Virtual Prototypes. I draw inspiration from developments in PLM methods in Auto- and Aero- industries as well as theories and methods developed in software engineering and management.

One of my greatest assets is that I'm mainly self taught. That is, I have picked bits and pieces of knowledge needed as I have developed projects. This gives me a very direct approach to the acquisition of knowledge. It has also taught me the value of working together with people and I much prefer good collaborative creativity to egocentric hierarchy. I find I'm often the odd piece in the puzzle giving me the opportunity to look at problems from a different angle. I design and develop as well as involve myself in the making of projects and enjoy getting my hands dirty.

With a bit of a hacker background I have a lifelong interest in digital culture and tools and have extensive computer skills in CAD/CAM and 3D animation software. In most of my projects I have integrated and investigated new ways of using computational tools.

In my spare time I enjoy riding my mountain bike down really steep hills and over big jumps or play around on the slopes on snowboard or skis.

**SELECTED PROJECTS** For more details and images of projects & explorations see: [www.wingate.se](http://www.wingate.se)

**Architecture & design:**

Stanford Law School	Model-based project coordination
Schmidlin/Novartis - Gehry	Specialist modelling & tool coding
Schmidlin/Burj Dubai	Specialist modelling & tool coding
Alsop/Fourth Grace	Lead 3D CAD specialist
Wingate Family Home	Design, develop and build
Icehotel AB	Sculpture and lighting design
Tussilago AB	Design, develop and build
Oji	Design, develop and build

**Art projects:**

Icehotel AB	Sculpture
Cellmark CE	Creative director
Tidsvåg Noll	Sculpture

**Digital & Technical:**

CIFE, Stanford	Process modelling & tools prototyping
Schmidlin, FEMO	Collaborative knowledge management
Unto This Last Ltd	CNC Robotic Manufacturing
National Film Board	Computer course development
Screen Image AB	Interface design for cash dispensers

**Events:**

JC	Creative directing
MTG/Power Hit Radio	Creative directing
U2, Universal	Technical directing and visuals
Nöjesguiden	Creative and technical directing

**Landscape Design:**

Icehotel AB	Exterior landscaping and lighting
Andie Cowie	Design, develop and build

**Theatre, TV & Film:**

Hamlet Inifrån/Riksteatern	Theatre set-design
Anna Sahlene	Props and set-design
Nordiskt Forum	Props and costume design
Villhesten	Costume assistant

**Teaching:**

KTH   Arkitekturskolan	4th year unit: Parametric Design
Stanford University	BA/MA course in Parametric Design
Luleå Tekniska Universitet	PhD course in UML & Parametric Design

**COMPUTER SKILLS**

**CAD/CAM & Visualization:**

Rhinoceros 3D	Surface modelling, scripting and plug-in programming, Grasshopper parametrics
Catia V5	Modelling of complex geometries with a focus on Architecture, manufacturing and simulation. Teaching experience
Inventor	Parametric design
SmarTeam	Use and implementation on projects
CustomObjects	Parametric design, teaching experience
Microstation	General purpose use
Navisworks	4D project coordination
Revit	General purpose use
MasterCAM	3-axis CNC machining, custom postprocessor programming
Softimage XSI	Animation and visualization
UnrealED	Real-time 3D using game engine

XML, XHTML, CSS	Your run of the mill web technology
CAM post processors	Custom processors written for Mastercam
GC script	Script interface to Generative Components
Cg, RenderMan	Shader programming
UML, EssWork	Agile process development, UP method implementation, UML modeling

**2D, Web, Video & Office:**

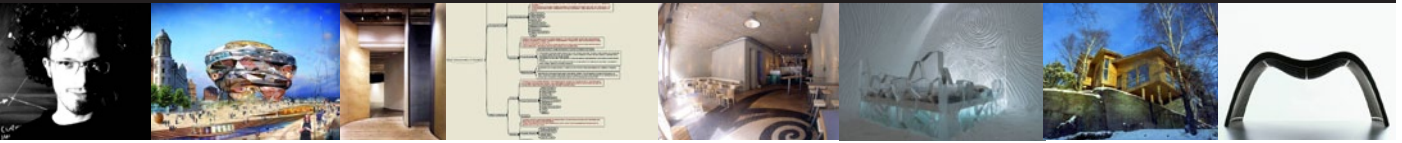
Visio	Custom shape design and programming
Office	General purpose use
Excel	Programming for combination with various CAD applications
FreeMind	Implementation of collaborative concept mapping
MediaWiki, DokuWiki, etc	Implementation of collaborative Knowledge Management using Wiki
Adobe Creative Suite	Photo-manipulation, web design, print production
Premiere	Video editing

**Programming:**

.NET C#	General purpose programming, Plug-in programming for Rhino
VB, VBA	Automation of Excel and other applications
RhinoScript	Rhino automation and custom tools
CatScript	Catia automation

**Hardware:**

MultiCAM and CamTech	3-axis CNC machines
Stratays FDM	Rapid prototyping



## POSITIONS HELD

### Research Engineer

CIFE, Stanford University, Palo Alto, USA

2008-07 – 2009-08

Multiple projects including teaching, project support and applied research.

### System Architect

SSARK, Skanska Xchange, Stockholm Sweden

2007-11 – 2008-07

Develop system architecture and modularization method for Skanska Scandinavia residential development.

### Visiting Researcher

CIFE Stanford University, Palo Alto, United States

2007-07 – 2007-10

Work on research project in Building Information Models and Design optimization

### Designer

Ekman Wingate AB, Skärkäll, Sweden

1995-05 – 2010-12

Design director and project manager for multiple Event, Interior and Architectural projects

### Instructor

Arkitektskolan, KTH, Stockholm, Sweden

2006-09 – 2006-12

Teach 3D parametric CAD concepts as part of 4th year Unit

### Super-user CAD

Schmidlin Fassadentechnologie AG, Basel, Switzerland

2005-06 – 2006-03

Develop and teach modelling methods for facades using Catia V5, develop custom CAD tools & collaborative process methods

### Architect

Alsop Architects, London, United Kingdom

2002-08 – 2004-07

Lead 3D CAD Specialist modelling and tools coding, implement the use of Catia V5 in Architecture

### Technician

Unto this Last, London, United Kingdom

2002-01 – 2002-06

CAD-CAM Integration development, automation and tool evaluation; Catia, Solidworks, Mastercam, Rhino

### Designer

Icehotel AB, Jukkasjärvi, Sweden

2001-01 – 2001-06

Develop CNC methods of machining ice, various design-related tasks

Positions prior to 1995 have been left out.

## EDUCATION

### Systemvetenskap,

Örebro Universitet, Örebro, Sweden

2006-08 – 2007-06

- Courses taken in Programming, Design patterns, Data Structures, Informatics and Software Engineering methods

### Catia V5 Sheetmetal,

TransCat PLM, Aesch, Switzerland

2005-08 – 2005-08

- 1 day, Advanced course in Catia V5 sheet metal

### GenerativeComponents - Early Adaptors Workshop

Cambridge University, Cambridge, UK

2003-06 – 2003-06

- 1 week course part of the Beta program training in Generative Components, a parametric design system

### Softimage LVL 1

Bell Labs, New York, USA

1998-01 – 1998-01

- 1 week Level 1 training in Softimage animation system

### Industri teknisk Utbildning

AMU, Göteborg, Sweden

1994-04 – 1995-05

- 1 year course in industrial welding using Arc, MIG and TIG for Structural and Tubing

### Scenografi

Romerrrike Teaterskole, Jessheim, Norway

1992-08 – 1993-05

- Theatre set-design with focus on costume design

### Konsten som Uttrycksmedel

Gerlesborgsskolan, Gerlesborg, Sweden

1992-06 – 1992-06

- 4 week art course

### NT-Linjen

Ljungkile Folkhögskola, Ljungkile, Sweden

1991-08 – 1992-05

- Complementary high school studies

### 4årig Teknisk

Strömstiernaskolan Gymnasium, Strömstad, Sweden

1988-08 – 1990-12

- High school

## LANGUAGES

### Swedish

Native

### English

Excellent

### Spanish

Minimal

### German

Minimal

## REFERENCES

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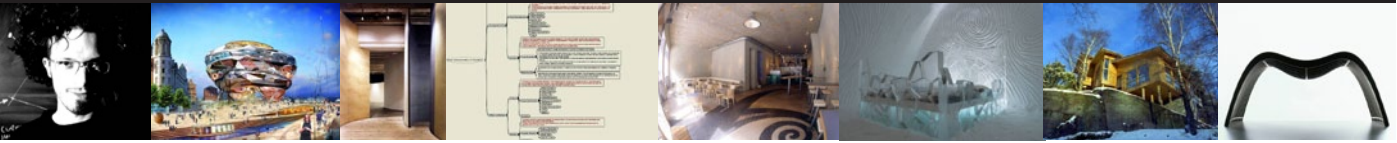
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## HISTORY

- Present** BIM and PLM consulting for construction industry.
- 2008 - 2009** Research engineer Center for Integrated Facility Engineering, Stanford University. Multiple assignments: Teach a class in Parametric Design, TA for Prof Martin Fisher, Collaboration with local construction consortium to test and validate CIFE methods.
- 2007 - 2008** Skanska Xchange: Work together with Jonas Runberger and Ylva Guntergerg at Scheiwiller Svensson Arkitektkontor AB on system architecture and method engineering for building modularization for Skanska residential development.
- 2007** Visiting Researcher at CIFE, Stanford University. Work on PhD project focusing on how modelling of processes and information flow across organizations in building consortia can improve understanding of interfaces and make better use of BIM.
- 2006 - 2007** Studying Informatics at Örebro Universitet. The ambition is to find similarities between methods used in IS development life-cycle and that of AEC. I actively look at methods like RUP, FA/SIM, VIBA, XP as well as some theories behind formal languages to see if any of this makes sense in a building development context.
- 2006** Co-tutor part 1 of the 4th year track Building InFormation together with Jonas Runberger at KTH school of Architecture. Great opportunity to put some thoughts and theories in practice and to get insightful reflections from a very stimulating and creative bunch of students.
- 2006** Before my studies started I spend a month working for Arup Sport in Manchester, focusing on knowledge management issues and doing a bit of concept modelling for the new national stadium in Singapore.
- 2005 - 06** Part of a specialist group at Schmidlin AG, Aesch, Switzerland. The group focused on long-term development in Supply-chain Process, Visualisation and Modelling using Catia and other tools. Here I was involved in developing a concept for the Visualisation & Simulation part of the group, did processing of geometry and modelling on a project for Novartis by Gehry, did a fair bit of work on knowledge capture mechanisms. I also did the graphic and functional design for a new company web site and developed documentation for in-house Catia training. Unfortunately Schmidlin went out of business before most of my work saw the light of day.
- 2004 - 05** Design a suite, two sculptures and assist in landscape-work at Icehotel, Sweden.
- 2002 - 04** Work at Alsop Architects, London, UK as lead 3D CAD specialist with complex geometry modelling using Rhino and Microstation. The primary project is the 4th Grace of Liverpool.
- 2003** External Critic at Simon Greenewold's Design Computation class, at Yale School of Architecture at New Haven, Connecticut, USA
- 2003** Lecture at University of Applied Arts Vienna, Austria, workshop, "Wire-frame [will] Work", organized by Sigrid Brell-Çokcan.
- 2003** Organize a 1 day conference together with Paul Cowell from Simply Rhino, UK. "Rhino for Architecture" in London, UK. Speakers include, Yanni Loukissas - MIT/Foster and Partners, Sigrid Brell-Çokcan - University of Applied Arts Vienna, David Rutten - TU-Delft, Olivier Geoffroy - Unto This Last and myself.
- 2003** Attend early adaptors workshop in Microstation Custom Objects in Cambridge, UK
- 2003** After a year at Alsop I start seeing Architecture and Architecture training differently. Convinced it is my field, but wanting to access it from a different angle I decline my place at AA.
- 2002** Apply for the Architecture programme at Architectural Association, London, UK. Based on portfolio I'm accepted into the 3rd year. Unfortunately I lack funding and am forced to postpone until the year after.
- 2002** Developing ideas for woven structures, based on basket weaving, I start investigating scripting technologies and parametric 3D CAD software, primarily Rhino and Catia.
- 2002** Consultant work for Unto This Last, a furniture maker in east London, UK. Primarily systems development and CAD - CAM integration.
- 2002** Back to the Icehotel, back to the wonderful frozen beauty of the north, it's such a vastly different place from London. I do lighting design and installation inside the hotel and do some work with a team of Landscape Architects students.
- 2001** My brother and I continue to work together, this time a residential interior for Sally Shalam, London. A total re-configuration of the space is needed in order to make it work. A lot of work goes into materials and finishes.
- 2001** A job in London, UK for film director Duddi Appleton; really an emergency problem solving task. The building company had screwed up creating the space and were asked to redo and repair their disaster. They failed badly. We took over and finished the space including decoration and styling.
- 2001** I go to Amsterdam to meet artist Chandra Brooks and help develop her art-project for Tuscany, Italy.
- 2001** Work as an intern at the Icehotel in Jukkasjärvi, Sweden. I have for a long time wanted to reduce the number of different materials involved in interior and architectural projects. The frustration of never having enough time to go into all the possibilities of each individual material. The Icehotel was an excellent opportunity to work with a minimal amount of materials and focus more on method and the content. Here I go into every aspect of making the hotel but with a focus on CNC machining and sculpture.

- 2000** Work with STYLT, Göteborg, Sweden. Reworking Säfsen conference centre and resort, as Production Lead/Designer. Tough job, crazy time-frame and inexperienced Team made this a less than pleasant experience.
- 2000** Creative directing and production of release party for film director Resa Parsa's latest film (no one has probably heard of him outside of Sweden).
- 2000** Make music-video props for pop artist Tomas Rusiak for Gemoll&Johnsson, Göteborg, Sweden.
- 2000** Music-video set design and styling for pop artist Anna Sahlene for Gemoll&Johnsson. A lot of hard work, intense and fun. Work together with set designer Louise Drake on a dark but stylish futuristic image.
- 2000** Continuing to work with the interior of the house I built for my parents. Surface finishes for bathroom, kitchen and bedroom completed. Part of a deliberately slow process to let the house grow by itself.
- 2000** Theatre set design. I design a large inflatable labyrinth, about 1900 square meters. Lighting and projections from the outside. People enter through an air-lock and see the play from inside the bubble. It plays in three large cities around Sweden.
- 1999 - 00** Work together with art director Andie Cowie to create and build an office for a small film production company; Tussilago in Göteborg, Sweden. Good people with a vision and guts to dare to do something different. Unfortunately not a very big budget and so, hard to complete. Here I really learnt that to be both designer, contractor and production leader is just too much for one person even with a small job like this. In the end it turned out rather well.
- 1999** Help develop a computer graphics course for the western branch of the National Film-board of Sweden. Mainly hardware and software research but also involved in content creation.
- 1999** Technical director on a party for JC Clothes. The second party we do for them. 1600 people party all night in space designed largely by me. Some experiments with inflatable set design.
- 1998 - 99** A lot of time goes into the design phase of creating a house for my parents in the eco-village where they now live. An external architect helps with the technical drawings. The building process starts late 98. The idea is to create a basic shell of a house and to let them live their way into the house over time. Build together with two carpenter friends for 9 months..
- 1998** Permanent art installation in the executive lounge at Cellmark office in Göteborg, Sweden. Work together with art director Andie Cowie.
- 1998** Create a booth for NNB, a group of seven women at the "Kvinnor Kan" convention.
- 1998** Ekman Wingate show some of what we do at a local trade-show. Mainly film and animation.
- 1998** Collaborate with Salgrenska university hospital and the brain researcher Dr. Rolf Ekman to illustrate and communicate ADHD better. Discussions an examples of CGI. Unfortunately it never got beyond planning stage due to lack of funds.
- 1998** Party for MTG/ Power Hit Radio, Göteborg for about 1000 people. Mainly concept development and creative directing.
- 1998** Oji nominated for Best Design and Best Bar by Nöjesguiden, a free monthly magazine available in all larger Scandinavian cities.
- 1998** Attend Softimage level 1 course at Bell Tech, New York. Expensive as hell but worth every penny.
- 1997 - 98** Spend 4 months I New York. Best described as Inspiration and Development trip. I spend my time seeing as much as possible of art, design and architecture. Work a bit as an assistant to an artist friend, Marc Mastroianni.
- 1997 - 98** Filmkrönikan, a film review TV-programme on national TV uses Oji as studio. Huzza - huzza, now everyone knows it.
- 1997** Interior design for Innovative Media, Göteborg, Sweden. Mostly surfaces and lighting.
- 1997** U2 play in Göteborg. I collaborate with art director René Lönngren to do the official after party for about 700 people. Concept and creative work and also some filming.
- 1997** Start developing designs for my parents house. My brother and I do a lot of work on the site to carefully grooming the natural vegetation.
- 1997** Info-stand for Tidsvåg Noll at the Book and Library Fair, Göteborg, Sweden.
- 1997** Work for Stylt Trampoli and Erik Nissen Johansen in making the Stora Hotellet in Fjällbacka, Sweden. Me and my brother work with special decoration and wall finishes. The Hotel becomes very successful and is mentioned in several magazines, amongst others World of Interiors.
- 1997** The first party for JC; kick-off party for their new logo and shop profile. Work together with my brother, Linda Falk and René Lönngren to create an all night party with fashion shows and a couple of Swedish pop-bands playing. JC's entire staff from all over Scandinavia; 1600 people.
- 1997** More work with Hannes, Linda and René; the second party for Nöjesguiden, Göteborg. Big award ceremony and a big party afterwards. We focus mostly on creating a really good and diverse party for about 1200 people.
- 1996 - 97** My brother Hannes and I create and build the restaurant Oji in Göteborg, Sweden. Our idea is to create a clean and open space that does not directly set the pace for what will happen during the course of a day. A variable space that can be both fast and slow and laid back. Hugely successful with the hip design and advertising crowd and copied several times.
- 1996** Create computer animation for Turbine Media, Göteborg, Sweden.
- 1996** Assistant to designer Erik Nissen creating the Cafe Le Croissant in Helsingborg, Sweden.

- 1996** Work for Stylt Trampoli and designer Erik Nissen creating the restaurant Victoria in Göteborg. Make metalwork and fixtures and do texturing and patina on walls and furniture.
- 1996** Start the Laymin Sound system together with friends Joel Alter and Torkel Forsberg, An ambulating club in Göteborg.
- 1996** My brother and I create costumes, props and a papier mache dragon for Barnens Dag at the Nordic Forum in Åbo, Finland. Play a part as the terrible magician Ooga Booga in an interactive fairytale for children. Later the evening the dragon eats a cameraman live on national TV.
- 1996** The first Nöjesguiden awards party. We work with people from theatres around the city to create an interesting experience for the 1100 visitors.
- 1995 - 96** The underground club Hotel Emperor becomes a creative playground for electronic musicians in Göteborg. All music was preformed live and four 12" EP:s and a lot of other material was released. In the end we had to close it down because it became to popular and attracted to much attention.
- 1995** First work with Stylt Trampoli and designer Erik Nissen. Making furniture and props for the restaurant Popcorn in Göteborg.
- 1995** My brother and I make three large metal sculptures for an Art and Technology exhibition in Göteborg. Meet many of my future col-laborators through this event, amongst others Erik Nissen, Ola Janson and Andie Cowie.
- 1994 - 95** Fifty-two weeks of learning how to weld and work metal by hand and with machine tools. The course was targeted towards mechanical industry and had no art what so ever included except how to do really good welds and joins.
- 1994** Work in a hotel bar in Göteborg.
- 1993** Move to Göteborg, first time to live in a city.
- 1993** Costume assistant on a feature film "Villhesten", Volda, Norway.
- 1992 - 93** One year Set-design course at Rommerike Theatre School outside Oslo, Norway.
- 1992** Art course at Gerlesborg Art School, Sweden.
- 1991 - 92** Finish my Gymnasium at Ljungskile Folkhögskola.
- 1991** Work as snowboard guide on Heli-skiing trips in Rixgränsen, Sweden
- 1991** Work in Åre, Sweden in a bar and later as a snowboard instructor.
- 1990** 5 months of voluntary work at the Centre For Alternative Technologies in Wales, UK. Help to build a water balanced cable car.
- 1990** My first interior job; A skateboard shop in Strömstad, the city where I grew up.
- 1990** Shortly after I drop out of school I get a job at an advertising company making interactive advertisements, and interfaces for Norwegian ATMs. Also some early HTML. With no real clue of what my skills are worth I end up with about \$500 for 4 months work.
- 1988 - 90** Gymnasium(Highschool): Hell on Earth. Useless old teachers not really interested in teaching me anything. I decided to drop out after realizing that most of them found me annoying when I really wanted to know more about the world.
- 1972 - 79** Both parents are film-makers and we moved around a lot before I started going to school. Spent a lot of time in odd places, amongst others, living amongst Sami people in northern Finland and out on a small island in the north sea, Honningsvåg, in north Norway.