Anoq of the Sun CV

Ánoq of the Sun (alias Johnny Bock Andersen), Hardcore Processing *

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Online Link for this CV

This document is available online in 2 file formats:

- `http://www.HardcoreProcessing.com/home/anoq/cv/anoqofthesuncv.ps`
- `http://www.HardcoreProcessing.com/home/anoq/cv/anoqofthesuncv.pdf`

The Short Version of this CV

- Founded the Company, *Hardcore Processing*, in 1998 where I have done *loads* of projects, most notably a complete formal specification and implementation of a programming language (CeXL) and the development of a commercial product (CeX3D Converter) with more commercial products on the way. See the project lists later in this document for details and lists of all the other projects as well.

  At Hardcore Processing I have also done freelance work for the companies: NetGroup, GateHouse and Context and customer projects for the companies: Virtual Effects & Fantasies, Leise & Company and Rebild Vandrerhjem. (1998-now).

- Worked full-time for 2.5 years as a *software developer* and *consultant* at Glaze (now called Prevas) (2004-2007).

- Worked on Open Source projects, most notably Berlin and GNUStep (1997-1999).

- Worked full-time for 1 year as a *3D-graphics artist* at Casper Thorsøe Video Production (1997-1998).

- Worked full-time for 5 months as a *programmer* (partially graphics artist) at Visionik (1997).

- Worked full-time for 2.5 years as a *programmer* at Sandlykke & Leifsgård (now called TargIT) (1994-1996).

- Made many other projects in private, especially related to *programming*, *3D-graphics production* and *music composition*, both in my spare-time while employed and before my professional career, starting already when I was 8-10 years old (1983-1998).

- I have read *many* books and research articles besides my education

- I have attended the *SIGGRAPH conferences* 1999, 2000, 2001, 2004, 2005, 2006, 2007 and the *EuroGraphics conference* 2007, for courses and paper sessions on the latest research in computer graphics technology

- Education:

  - **Bachelor's degree** in *computer science* and *maths* from the University of Copenhagen in Denmark (1998-2004).
    I have *Modern Greek grammar* as extra subject and I was an ERASMUS exchange student in mathematics at the University of Athens in Greece.

  - **Highschool** *mathematical line* with high level *maths* and *music* from Dronninglund Gymnasium in Denmark (1991-1994).

The rest of this document is the detailed version of my CV.
Hopefully it is easy to skim through, since it is mostly tables with headlines.

About this CV

The following should be noted:

- **All time usage is only counted once**:
  No projects or courses counts the same time or efforts more than once. So for instance, even though CeX3D Converter uses CeXL internally, I have not counted the time used for designing or implementing CeXL twice. Also, the time used for all university projects which are relevant for my company (Hardocore Processing) are only counted once in the project lists.
- **...except for the employment list**:
  The only exception is that the list of companies where I have been employed counts the total employment time, even though the work done there is also counted in the project lists, but this is clearly stated in the headline for that section.
- **References to educative material are sometimes repeated**:
  Some references to educative material are repeated more than once, when it is relevant for several projects or topics.
- **Duration is considered as full-time work**:
  Whenever I write 'Duration' I mean when considered as full-time work:
  - *1 day = 7.5 hours*
  - *1 week = 5 days*
  - *1 month = 22 days*
  - *1 year = 12 months*

  These durations are sometimes estimates, but most are hopefully fairly accurate - and yes, I have generally 'worked' more than full-time in my life, since many of the things I have done are also spare-time interests.

Projects Related to Software Development

	Key for "Technologies":
P:	**P**rogramming language
L:	Other kind of **L**anguage
A:	**A**pplication Programmer's Interface (**A**PI)
T:	Software development **T**ool
O:	**O**perating system or platform
B:	Significant amount of reading **B**ooks
RA:	Significant amount of reading **R**esearch **A**rticles

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **Implement CeXL** parser, types, interpreter www.CeX3D.net/cexl/	Hardcore Processing www.HardcoreProcessing.com	2003-2004	1 month	Standard ML (**P**) CeXL (**P**) SML/NJ, MLton (**T**) Linux (**O**)
· **Design of CeXL** a programming language www.CeX3D.net/cexl/	Hardcore Processing www.HardcoreProcessing.com	1999-2004	1 year	Standard ML (**P**) Prog. lang. semantics (**RA**, **B**) LaTeX (**L**)
· **Software for hospital equipment**	GateHouse www.gatehouse.dk (worked on-site at GateHouse's client)	2003	1.5 months	C/C++ (**P**) UML (**L**) Rational Rose (**T**) MS Visual C++ (**T**) Windows 2000 / CE (**O**)
· **CeX3D Converter** LightWave 3D/Unreal Ed/ RenderMan RIB converter www.CeX3D.net/converter/	Hardcore Processing www.HardcoreProcessing.com	1999-2001	3 months	Standard ML (**P**) SML/NJ, MLton (**T**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **SDL::ML** SDL bindings for Standard ML www.HardcoreProcessing.com/pro/sdlml/	Hardcore Processing www.HardcoreProcessing.com	1999-2003	1 month	C, Standard ML (**P**) SDL (**A**) SML/NJ, MLton, ML Kit (**T**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **UI::ML** as-of-yet unreleased user interface toolkit surpassing AbstractUI::ML	Hardcore Processing www.HardcoreProcessing.com	2002-2003	2 months	Standard ML (**P**) SML/NJ, MLton, MinGW (**T**) SDL, SDL::ML, (**A**) Linux, Windows (**O**)
· **CeX3D SM** in-house 3D program for subdivision surfaces www.CeX3D.net/sm/	Hardcore Processing www.HardcoreProcessing.com	2000-2002	3 months	Standard ML, CeXL (**P**) SML/NJ, MLton (**T**) MinGW (**T**) SDL, SDL::ML, UI::ML (**A**) RI::ML, Fast CeXyMan (**A**) Linux, Windows (**O**)
· **Implement old CeXL** parser, interpreter	Hardcore Processing www.HardcoreProcessing.com	2000-2002	2 months	Standard ML (**P**) SML/NJ, MLton (**T**) Linux (**O**)

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **Internet Payment System** (worked on design and implementation)	NetGroup www.netgroup.dk	2001-2002	2 months	C/C++, Standard ML (**P**) UML, LaTeX (**L**) LyX, dia (**T**) Linux (**O**)
· **Interactive Showreel** company demo program www.HardcoreProcessing.com/company/showreel/	Hardcore Processing www.HardcoreProcessing.com	2001	5 days	Standard ML (**P**) SML/NJ, MLton, MinGW (**T**) SDL, SDL::ML, UI::ML (**A**) RI::ML, Fast CeXyMan (**A**) Linux, Windows (**O**)
· **Fast CeXyMan** interactive 3D renderer using the RenderMan API (actually RI::ML) internally. Written in Standard ML	Hardcore Processing www.HardcoreProcessing.com	2000-2002	2 months	Standard ML (**P**) SML/NJ, MLton, MinGW (**T**) SDL, SDL::ML (**A**) RI::ML (**A**) Linux, Windows (**O**)
· **Standard ML Code** generally useful SML code 2D/3D geometry, combinator parsing, etc. www.HardcoreProcessing.com/pro/smlcode/	Hardcore Processing www.HardcoreProcessing.com	1999-2001	1 month	Standard ML (**P**) SML/NJ, MLton, ML Kit (**T**) Linux, Windows (**O**)
· **ISAPI Plugins for Zeus Webserver** programming	NetGroup www.netgroup.dk	2001	1 week	C (**P**) HTML (**L**) ISAPI, CGI (**A**) gcc, Zeus Webserver, IIS (**T**) Linux, Windows (**O**)
· **Internet Payment System Client** implementation of client and backends, ASP examples, documentation	NetGroup www.netgroup.dk	2000-2001	3 months	C/C++, ASP (**P**) UML, LaTeX, HTML (**L**) COM, CGI (**A**) gcc, MS Visual C++ (**T**) Zeus Webserver, IIS (**T**) Linux, Windows (**O**)
· **Misc. Other Programming**	NetGroup www.netgroup.dk	2000-2001	1 month	C/C++ (**P**) HTML (**L**) CGI, MIME, (**A**) MS Excel ODBC (**A**) MS Access ODBC (**A**) IRIX/POSIX Shared Mem. (**A**) gcc, MS Visual C++ (**T**) MS NMake (**T**) Zeus Webserver, IIS (**T**) Linux, IRIX, Windows (**O**)
· **RI::ML** RenderMan Interface for Standard ML www.HardcoreProcessing.com/pro/riml/	Hardcore Processing www.HardcoreProcessing.com	1999-2000	3 weeks	Standard ML (**P**) RenderMan (**A**) SML/NJ, MLton, ML Kit (**T**) Linux (**O**)

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **Rebild Vandrerhjem Website** website programming and translation from Danish to English and Greek www.vandrerhjem.net	Rebild Vandrerhjem www.vandrerhjem.net	2001	4 days	HTML (**L**) Danish, English, Greek (**L**) Linux, Windows (**O**)
· **ABC Expedition** game (programming) www.HardcoreProcessing.com/entertainment/	Virtual Effects & Fantasies www.vef.dk	2000	3 weeks (14 days)	Standard ML (**P**) SDL, SDL::ML (**A**) SML/NJ, MLton (**T**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **The Unlimited Game** game (programming) www.HardcoreProcessing.com/entertainment/	Virtual Effects & Fantasies www.vef.dk	1999	8 days	Standard ML (**P**) SDL, SDL::ML (**A**) SML/NJ, MLton, ML Kit (**T**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **The Sunkist Puzzle** game (programming) www.HardcoreProcessing.com/entertainment/	Virtual Effects & Fantasies www.vef.dk	1999	3 days (25 hours)	C/C++ (**P**) SDL (**A**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **Leaf Invaders** game (programming) www.HardcoreProcessing.com/entertainment/	Virtual Effects & Fantasies www.vef.dk	1999	8 days	C/C++ (**P**) SDL (**A**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **Billy The Kid** game (programming) www.HardcoreProcessing.com/entertainment/	Virtual Effects & Fantasies www.vef.dk	1999	2 weeks	C/C++ (**P**) SDL (**A**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **Misc. Programming** GUI stuff, printer routines, ODBC programming in C++	Context	1999	1 month	C/C++, Delphi Pascal (**P**) gcc (**T**) ODBC (**A**) Delphi, C++ Builder (**T**) Linux, Windows (**O**)
· **MLton for Windows** port of MLton compiler for cross-compiling to Windows www.HardcoreProcessing.com/pro/winmain/	Hardcore Processing www.HardcoreProcessing.com	1999-2003	1 month	C, Standard ML (**P**) MLton (**T**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **ML Kit for Windows** port of ML Kit compiler for cross-compiling to Windows www.HardcoreProcessing.com/pro/winmain/	Hardcore Processing www.HardcoreProcessing.com	1999	2 weeks	C, Standard ML (**P**) ML Kit (**T**) gcc, MinGW (**T**) Linux, Windows (**O**)

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **WinMain**, library for porting to Windows www.HardcoreProcessing.com/pro/winmain/	Hardcore Processing www.HardcoreProcessing.com	1999	3 days	C (**P**) gcc, MinGW (**T**) Linux, Windows (**O**)
· **CodeTransformer** reads OMG IDL files and C++ header files and generates C++ code www.HardcoreProcessing.com/pro/codetransformer/	Hardcore Processing www.HardcoreProcessing.com	1999	1 month	Standard ML (**P**) C++, OMG IDL (**P**) SML/NJ, ML Works (**T**) ML-Yacc, ML-Lex **(L, T)** Linux, Windows (**O**)
· **The Construct** old user interface builder www.HardcoreProcessing.com/pro/theconstruct/	Hardcore Processing www.HardcoreProcessing.com	1999	2 weeks	Standard ML (**P**) SML/NJ, ML Works (**T**) Linux, Windows (**O**)
· **AbstractUI::ML** old user interface toolkit www.HardcoreProcessing.com/pro/abstractuiml/	Hardcore Processing www.HardcoreProcessing.com	1998-1999	4 months	Standard ML (**P**) SML/NJ, ML Works (**T**) eXene (**A**) Linux, Windows (**O**)
· **A Small 3D Wireframe Demo** test of Standard ML for real-life use www.HardcoreProcessing.com/pro/asmall3dwireframedemo/	Hardcore Processing www.hardcoreprocessing.com	1997-1998	???	Standard ML (**P**) SML/NJ (**T**) eXene (**A**) Linux (**O**)
· **ML Performance Test** performance test of SML/NJ vs. gcc www.HardcoreProcessing.com/home/anoq/Programming/MLSpeed.html	Hardcore Processing www.hardcoreprocessing.com	1997-1998	???	Standard ML (**P**) C, Objective-C (**P**) SML/NJ, gcc (**T**) eXene (**A**) Linux (**O**)
· **Hardcore Processing Website** it is a huge website! www.HardcoreProcessing.com	Hardcore Processing www.hardcoreprocessing.com	1998-2007	???	HTML, LaTeX (**L**) Standard ML (**P**) ML Server Pages (**P**) Linux, Windows (**O**)

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **W3C's Document Object Model (DOM)** implemented in C++ used with or without CORBA www.HardcoreProcessing.com/pro/domimplementation/	Berlin (Open Source) www.berlin-consortium.org	1998	1 month	C, C++, OMG IDL (**P**) egcs (gcc), omniORB (**T**) Linux, CORBA (**O**)
· **Warsaw API in Berlin** discussion and software/API design www.HardcoreProcessing.com/ home/anoq/Programming/Warsaw.html	Berlin (Open Source) www.berlin-consortium.org	1997-1999	???	C, C++, OMG IDL (**P**) egcs, gcc, omniORB (**T**) Linux, CORBA (**O**)
· **GNUStep/NSXKit** implemented parts of NeXT's OpenStep API for X-Windows www.HardcoreProcessing.com/ home/anoq/Programming/GNUStep.html	GNUStep (Open Source) www.gnustep.org	1997	???	C, Objective-C (**P**) gcc (**T**) Linux, X-Windows (**O**)
· **GNUStep NSAttributedString** implemented classes of NeXT's OpenStep API www.HardcoreProcessing.com/ home/anoq/Programming/GNUStep.html	GNUStep (Open Source) www.gnustep.org	1997	???	C, Objective-C (**P**) gcc (**T**) Linux (**O**)

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **(During Employment)** interactive CD-ROM programming, game programming	Visionik (I was employed) www.visionik.dk	1997	4.5 months	Delphi Pascal (**P**) Delphi, Authorware (**T**) Director (**T**) Windows (**O**)
· **Up-To-Date** worked on service system for Danish optic shops. Mostly worked on the (fairly complex) part for ordering glass	Sandlykke & Leifsgård (I was employed) www.targit.dk	1996	1 year	Delphi Pascal (**P**) Delphi (**T**) BTrieve, InterBase (**T**) ODBC (**A**) SQL (**L**) Windows (**O**)
· **TankMax** worked on economy system for gas stations	Sandlykke & Leifsgård (I was employed) www.targit.dk	1995	1 month	Turbo Pascal (**P**, **T**) BTrieve (**T**) DOS (**O**)
· **ELFOs Meldesystem** computer system for registering companies performing work on electrical house installations and check that the Danish law for 'licitation' is respected	Sandlykke & Leifsgård (I was employed) www.targit.dk	1994-1995	1 year and 4 months	Delphi Pascal (**P**) C, JAM Prog. Lang (**P**) Delphi, JAM (**T**) BTrieve, InterBase (**T**) ODBC (**A**) SQL (**L**) Windows (**O**)
· **Crossplatform GUI toolkit** (unreleased) in C / C++ / Objective-C www.HardcoreProcessing.com/ home/anoq/Programming/GUIDevTool.html	(Private)	1995-1997	???	C, C++, Objective-C (**P**) Lattice C / SAS C (Amiga) (**T**) gcc (Amiga / x86) (**T**) AmigaOS, NetBSD (Amiga) (**O**) Linux (x86) (**O**)
· **Amiga Games** programming for 1 whole and 2 halve games (unreleased) www.HardcoreProcessing.com/ home/anoq/Programming/AmigaGames.html	(Private)	1990-1994	???	C (**P**) Lattice C (Amiga) (**T**) AmigaOS (**O**)

Projects Related to Graphics Production

	Key for "Technologies":
3D:	**3D** software application
2D:	**2D** software application
P:	**P**rogramming language
L:	Other kind of **L**anguage
O:	**O**perating system or platform

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **In-House Tests** (unreleased) 3D models and scenes, RenderMan shaders	Hardcore Processing www.hardcoreprocessing.com	1998-2004	1 month	BMRT, CeX3D SM (**3D**) RenderMan Shading Lang. (**P**) RenderMan RIB (**L**) Linux, Windows (**O**)
· **Rebild Vandrerhjem Website** website graphics www.vandrerhjem.net	Rebild Vandrerhjem www.vandrerhjem.net	2001	3 days	PhotoShop (**2D**) Linux, Windows (**O**)
· **Ceres Royal X-Mas Animation** www.hardcoreprocessing.com/movies/ceresxmas2001/	Leise & Co. www.leise.dk	2001	1 week	PhotoShop (**2D**) Adobe Premier (**2D**) Windows (**O**)
· **1000kr Bank Note Danish TV Spot** all 3D modelling, animation, surfacing, rendering and editing/compositing (a collegue did all textures, 2D backgrounds and the storyboard)	Casper Thorsøe Video Production (I was employed) www.ctvp.com	1997	2.5 months	A|W Power Animator (**3D**) A|W Maya (**3D**) A|W Composer (**2D**) Silicon Graphics / IRIX (**O**)
· **500kr Bank Note Danish TV Spot** worked on 3D modelling, animation, surfacing, rendering	Casper Thorsøe Video Production (I was employed) www.ctvp.com	1997	1.5 months	A|W Power Animator (**3D**) Silicon Graphics / IRIX (**O**)
· **Misc Small Projects** 3D modelling, animation, surfacing, rendering, texture painting, editing/compositing	Casper Thorsøe Video Production (I was employed) www.ctvp.com	1997-1998	8 months	A|W Power Animator (**3D**) SoftImage, A|W Maya (**3D**) A|W Composer (**2D**) PhotoShop (**2D**) Windows (**O**) Silicon Graphics / IRIX (**O**)

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **(During Employment)** simple 3D modelling and character animation, misc. graphics	Visionik (I was employed) www.visionik.dk	1997	2 weeks	PhotoShop (**2D**) 3D Studio Max (**3D**) Windows (**O**)
· **The Party '96** **3D Animations** 3D modelling, animation, surfacing, rendering etc. www.hardcoreprocessing.com/home/anoq/ GraphicsInfo/3DGraphicsOverview.html	(Private)	1996	2 months	LightWave 3D, Real 3D (**3D**) Deluxe Paint (**2D**) Art Department Pro (**2D**) PhotoShop, cmpeg (**2D**) AmigaOS, Windows (**O**)
· **Private 3D Graphics** 3D modelling, animation, surfacing, rendering, texture creation etc. www.hardcoreprocessing.com/home/anoq/ GraphicsInfo/3DGraphicsOverview.html	(Private)	1991-1997	???	LightWave 3D, Real 3D (**3D**) Deluxe Paint (**2D**) Art Department Pro (**2D**) PhotoShop, cmpeg (**2D**) AmigaOS, Windows (**O**)
· **Amiga Games** 2D and 3D graphics for 1 whole and 2 halve games (unreleased) www.HardcoreProcessing.com/home/anoq/ Programming/AmigaGames.html	(Private)	1990-1994	???	Deluxe Paint (**2D**) Real 3D (**3D**) AmigaOS (**O**)
· **"Analog Painting** **and Modelling"** I paint on paper, painted my living room as an Egyptian desert, did clay and cardboard models for role-playing etc.	(Private)	????-2004	???	pen, pencil, acrylic paint, wall paint, clay etc.

Projects Related to Music and Sound Production

	Key for "Technologies"
S:	**S**ynthesiezer or similar hardware
M:	**M**usic software application
O:	**O**perating system or platform

Project	Client	Dates	Duration 1 day=7.5 hrs	Technologies
· **My Compositions** many pieces of instrumental electronic music composed (unreleased, looking into releasing a CD)	(Private)	1990-2004	???	Audio Master (**M**) Sonix, Bars & Pipes (**M**) Sequitur (**M**) Korg Wavestation Ex (**S**) Alesis Quadrasynth Plus Piano (**S**) AmigaOS, BeOS (**O**)
· **Rising from Atlantic** one piece of instrumental electronic music composed for fashion show at a friend's school	(Private) (for a friend) (played in public)	1993	2 weeks	Bars & Pipes (**M**) Korg Wavestation Ex (**S**) AmigaOS (**O**)
· **Amiga Games** sound for 1 game (unreleased) www.HardcoreProcessing.com/ home/anoq/Programming/AmigaGames.html	(Private)	1990-1994	???	Audio Master (**M**) AmigaOS (**O**)

Conferences Attended

	Key for "Course Material":
B:	**B**ook
RA:	**R**esearch **A**rticles
CD:	**CD**-ROM or DVD-ROM

Course	Conference	Dates	Duration 1 day=7.5 hrs	Course Material
Paper Sessions (presentations of latest research)	SIGGRAPH www.siggraph.org/s2004/	2004	4 days	'acm Transactions on Graphics Aug 2004, Vol 23, Nr 3' (**B**, **RA**)
Point-Based Computer Graphics (course 6)	SIGGRAPH www.siggraph.org/s2004/	2004	1 day	'SIGGRAPH 2004 Full Conference DVD-ROM' (**CD**)
Paper Sessions (presentations of latest research)	SIGGRAPH www.siggraph.org/s2001/	2001	3 days	'SIGGRAPH 2001 Conference Proceedings' (**B**, **RA**)
How to Give a Great SIGGRAPH Talk (course 41)	SIGGRAPH www.siggraph.org/s2001/	2001	3 hours	'How to Give a Great SIGGRAPH Talk' (**B**, **CD**)
Aquisition and Visualization of Surface Light Fields (course 46) (only first half)	SIGGRAPH www.siggraph.org/s2001/	2001	3 hours	'Aquisition and Visualization of Surface Light Fields' (**B**, **CD**)
State of the Art in Monte Carlo Ray Tracing for Realistic Image Synthesis (course 29)	SIGGRAPH www.siggraph.org/s2001/	2001	1 day	'State of the Art in Monte Carlo Ray Tracing for Realistic Image Synthesis' (**B**, **CD**)
Advanced Global Illumination (course 20)	SIGGRAPH www.siggraph.org/s2001/	2001	3 hours	'Advanced Global Illumination' (**B**, **CD**)
Obtaining 3D Models with a Hand-Held Camera (course 2)	SIGGRAPH www.siggraph.org/s2001/	2001	3 hours	'Obtaining 3D Models with a Hand-Held Camera' (**B**, **CD**)
Paper Sessions (presentations of latest research)	SIGGRAPH www.siggraph.org/s2000/	2000	3 days	'SIGGRAPH 2000 Conference Proceedings' (**B**, **RA**)
Advanced Issues in Level of Detail (course 41)	SIGGRAPH www.siggraph.org/s2000/	2000	1 day	'Advanced Issues in Level of Detail' (**B**, **CD**)
Approaches for Procedural Shading on Graphics Hardware (course 27)	SIGGRAPH www.siggraph.org/s2000/	2000	1 day	'Approaches for Procedural Shading on Graphics Hardware' (**B**, **CD**)
A Practical Guide to Global Illumination using Photon Maps (course 8)	SIGGRAPH www.siggraph.org/s2000/	2000	3 hours	'A Practical Guide to Global Illumination using Photon Maps' (**B**, **CD**)
Developing Efficient Graphics Software (course 6) (only first half)	SIGGRAPH www.siggraph.org/s2000/	2000	3 hours	'Developing Efficient Graphics Software' (**B**, **CD**)
Paper Sessions (presentations of latest research)	SIGGRAPH www.siggraph.org/s99/	1999	3 days	'SIGGRAPH 1999 Conference Proceedings' (**B**, **RA**)
Subdivision for Modelling and Animation (course 37)	SIGGRAPH www.siggraph.org/s99/	1999	1 day	'Subdivision for Modelling and Animation' (**B**, **CD**)
Advanced RenderMan: Beyond the Companion (course 25)	SIGGRAPH www.siggraph.org/s99/	1999	1 day	'Advanced RenderMan: Beyond the Companion' (**B**, **CD**)
From Fourier Analysis to Wavelets (course 5)	SIGGRAPH www.siggraph.org/s99/	1999	1 day	'From Fourier Analysis to Wavelets' (**B**, **CD**)

My M.Sc. in Computer Science (2004-..., Not Yet Graduated)

	Key for "Institution":
DIKU:	Cumputer Science Department at the University of Copenhagen, Denmark
ITU:	IT-University of Copenhagen, Denmark

	Key for "Course Material":
B:	**B**ook
N:	Special course **N**otes
RA:	**R**esearch **A**rticles

M.Sc. Courses in Computer Science

Course	Institution	Dates	Duration 1 day=7.5 hrs	Course Material	Notes
Formal Semantics of Programming Langauges	DIKU	2007	2 months	'Formal Semantics of Programming Langauges' (**B**) Misc articles (**RA**)	No
Types and Programming Langauges	DIKU	2004	2 months	'Types and Programming Langauges' (**B**) Misc articles (**RA**)	No
Topics in Language Based Security (Ph.D. summer course)	ITU	2001	1 week	Misc articles (**RA**)	No
Advanced Compiler Construction	DIKU	2000	2 months	'Modern Compiler Implementation in ML' (**B**) Misc articles (**RA**)	No

My B.Sc. in Computer Science and Mathematics (1998-2004)

	Key for "Institution":
Ath:	Maths Department at the University of **Ath**ens, Greece
DIKU:	Cumputer Science Department at the University of Copenhagen, Denmark
HCØ:	Maths Department at the University of Copenhagen, Denmark
ØEI:	Eastern Europe Institute at the University of Copenhagen, Denmark

	Key for "Course Material":
B:	**B**ook
N:	Special course **N**otes
RA:	**R**esearch **A**rticles

Key for "Notes":
Tells which courses I wrote publicly available notes for at:
`http://www.HardcoreProcessing.com/articles/maths/summaries/`
`http://www.HardcoreProcessing.com/articles/humlang/greek/`

B.Sc. Courses in Mathematics

Course	Institution	Dates	Duration 1 day=7.5 hrs	Course Material	Notes
Mat 2AL	HCØ	2003-2004	2 months	'Algebra' (**B**)	Yes
Measure Theory / Mat 3MI	Followed at **Ath** exam at **HCØ**	2002-2004	2 months	'*Θεωρία Μέτρου*' (**B**) 'Mål- og integralteori' (**B**)	Yes
Probability I	Ath	2002-2003	2 months	'*Θεωρία* Π*ιθανοτήτων και Εφαρμογές* I' (**B**)	Yes
Mat 3GT	HCØ	2002-2003	2 months	'Topology' (**B**)	Yes
Mat 2KF	HCØ	2002-2003	2 months	'Kompleks Funktionsteori' (**B**)	Yes
Mat 3GE	HCØ	2002	2 months	'Elemental Differential Geometry' (**B**)	Yes
Mat 2AN	HCØ	2001-2002	2 months	'Metriske Rum' (**B**) 'Hilbert Rum' (**B**)	Yes
Mat Y	HCØ	2001	1 month	'Introduktion til abstrakt matematik' (**B**)	A few
Mat 1GB	HCØ	1999	2 months	'Linear Algebra' (**B**)	A few
Mat 1GA	HCØ	1998	2 months	'Linear Algebra' (**B**)	A few
Mat XX	HCØ	1998	2 months	'Aspects of Combinatorics' (**B**)	No

Additional B.Sc. Course in Modern Greek Grammar

Course	Institution	Dates	Duration 1 day=7.5 hrs	Course Material	Notes
Grammatik	ØEI	2004	1.5 months	'Lærebog i græsk for universitetsstuderende' (**B**) 'Lille kompendium i græsk grammatik' (**B**)	Yes

B.Sc. Courses in Computer Science

Course	Institution	Dates	Duration 1 day=7.5 hrs	Course Material	Notes
Bachelor's Thesis 'Definition of CeXL' (see Design of CeXL in project list) www.CeX3D.net/cexl/	DIKU	2003	(counted in project list)	'Definition of Standard ML' (**B**) Loads of other books and articles (**B**, **RA**) (see thesis litterature list)	Thesis
Dat 1F	DIKU	2002-2003	2 months	'Operating System Concepts' (**B**) 'Computer Networking' (**B**) 'Multiprogrammering' (**N**) 'Programmering på Digital Alpha-arkitekturen' (**N**)	No
Dat 2A	DIKU	2001	2 months	'Introduction to Algorithms' (**B**) 'Branch & Bound Algorithms & Generelle Optimeringsheuristikker' (**N**)	No
Dat 1E	DIKU	1999	2 months	'Computer Organization & Design' (**B**) 'Arkitekturdelen' (**N**) 'SimSys' (**N**) 'Oversætterdelen' (**N**) 'Basics of Compiler Design' (**N**)	No
Dat 2V Grafik	DIKU	1999	2 months	'Computer Graphics Principles and Practice' (**B**)	No
Dat 2V Programmeringssprog	DIKU	1999	2 months	Lecture notes on operational semantics (**N**)	No
Dat 0	DIKU	1998-1999	4 months	'ML for the Working Programmer' (**B**) 'Introduction to ML' (**B**) 'Data Structures & Problem Solving Using Java' (**B**) 'UML Distilled' (**B**) 'Funktioner og simple datastrukturer' (**N**) 'Videregående algoritmer, datastrukturer og typer' (**N**)	No

Basic Education and Misc Courses

Education	Institution	Dates	Duration 1 day=7.5 hrs	Educ. Material
Modern Greek for ERASMUS students	University of Athens Greece	2002-2003	4 months	'$E\lambda\lambda\eta\nu\iota\kappa\acute{\alpha}$ $\gamma\iota\alpha$ $ERASMUS$'
Modern Greek evening course	Københavns Kommunes Aftenskole	2000-2001	2 weeks	'$E\lambda\lambda\eta\nu\iota\kappa\acute{\alpha}$ $T\acute{\omega}\rho\alpha$ $1+1$'
High School (mathematical line with high level maths and high level music)	Dronninglund Gymnasium	1991-1994	3 years	
Elementary School (up till 9th grade)	Dybvad Skole	1981-1991	10 years	

Employment
(Durations Already Counted in Project Lists)

Company	Dates	Duration 1 day=7.5 hrs
Glaze (now called Prevas) www.prevas.dk	2004-2007	2.5 years
Various freelance work for various companies	1998-2003	(see project lists)
Hardcore Processing I founded this company 27th of september 1998 www.hardcoreprocessing.com	1998-now	(see project lists)
Casper Thorsøe Video Production www.ctvp.com	1997-1998	1 year
Visionik www.visionik.dk	1997	5 months
Sandlykke & Leifsgård (now called TargIT) www.targit.dk	1994-1996	2 years and 5 months

Other Education (Books, Research Articles etc.)

This mostly covers things I learned myself. There are *other ways* to learn than from schools, universities and conferences.

	Key for "Material":
B:	**B**ook
S:	**S**pecification
RA:	**R**esearch **A**rticles

Topic	Material
Semantics of programming languages	'Types and Programming Languages' (**B**) 'The Formal Semantics of Programming Languages' (**B**) 'Programming Languages: Concepts and Constructs' (**B**) 'The Definition of Standard ML' (**S**) *Research articles* (**RA**)
Compiler technology	'Modern Compiler Implementation in ML' (**B**) 'Compilers, Principles, Techniques & Tools' (**B**) 'Advanced Compiler Design Implementation' (**B**) 'The Implementation of Functional Programming Languages' (**B**) 'Partial Evaluation and Automatic Program Generation' (**B**) *Research articles* (**RA**)
Programming	*Material about specific languages and APIs (see my skill list)*
RenderMan	'The RenderMan Companion' (**B**) 'Advanced RenderMan: Creating CGI for motion pictures' (**B**) 'The RenderMan Interface Specification' (**S**)
3D Computer Graphics	*The RenderMan material listed above* 'Principles of Digital Image Synthesis' (**B**) 'Advanced Animation and Rendering Techniques' (**B**) 'Computer Graphics: Principles and Practice' (**B**) '3D Computer Graphics' (**B**) 'Advanced Global Illumination' (**B**) 'Realistic Image Synthesis Using Photon Mapping' (**B**) 'Radiosity and Global Illumination' (**B**) 'Point-Based Graphics' (**B**) 'Level Set Methods and Dynamic Implicit Surfaces' (**B**) 'Introduction to Implcit Surfaces' (**B**) 'Real-Time Rendering' (**B**) 'Real-Time Volume Rendering' (**B**) '3D Game Engine Design' (**B**) 'Graphics Gems I, II, III, IV' (**B**) 'High Dynamic Range Imaging' (**B**) 'Texturing and Modelling' (**B**) 'The Art and Science of Digital Compositing' (**B**) 'Building a 3D game engine in C++' (**B**) *Many SIGGRAPH Course Notes Books* (**B**) *Many research articles (e.g. SIGGRAPH, EuroGraphics)* (**RA**)
Misc	'The CORBA specifications' (**S**) 'Developing Business Applications with OpenStep' (**B**) 'Artificial Intelligence Agents in Virtual Reality Worlds' (**B**)

Some of My Skills

	Key for "Kind":
P:	**P**rogramming language
L:	Other kind of **L**anguage
A:	**A**pplication Programmer's Interface (**A**PI)
T:	Software development **T**ool
3D:	**3D** software application
2D:	**2D** software application
M:	**M**usic software application
O:	**O**perating system or platform

Skill	Kind	Skill level (1-10) 11 = "I invent the future"
Standard ML (a.k.a. SML '97)	(**P**)	11
CeXL	(**P**)	11
Haskell	(**P**)	3
O'Caml	(**P**)	7
LISP	(**P**)	4
Scheme	(**P**)	4
C	(**P**)	10
C++	(**P**)	10
Objective-C	(**P**)	8
C#	(**P**)	7
Java	(**P**)	8
Delphi Pascal	(**P**)	10
RenderMan Shading Language	(**P**)	10
Basic	(**P**)	7
Ada	(**P**)	1
JAM Programming Language (Jyacc App. Manager)	(**P**)	5
Real 3D Programming Langauge	(**P**)	5
MEL (Maya Embedded Language)	(**P**)	8
OMG Interface Definition Language (IDL for CORBA)	(**L**)	7
COM Interface Definition Language (IDL for COM)	(**L**)	7
SQL	(**L**)	6
LaTeX	(**L**)	10
HTML	(**L**)	8
WML (WAP Markup Language)	(**L**)	3
WMLScript	(**L**)	2
UML (Unified Modelling Language)	(**L**)	8
Regular Expressions	(**L**)	9
BNF-Grammar	(**L**)	10
Operational Semantics	(**L**)	10
RenderMan	(**P**, **L**, **A**)	10
OpenGL	(**A**)	6
Maya Plugin API	(**A**)	6
LightWave 3D plugin API	(**A**)	5
SDL (Simple Direct Media Layer)	(**A**)	9
DirectX	(**A**)	6
CyberGraphX	(**A**)	1
XLib (X-Windows)	(**A**)	4

Skill	Kind	Skill level (1-10) 11 = "I invent the future"
eXene	(**A**)	8
Swing	(**A**)	4
OpenStep	(**A**)	8
Delphi Visual Component Library	(**A**)	10
Standard ML Basis Library	(**A**)	11
Document Object Model (DOM)	(**A**)	7
ODBC	(**A**)	7
BTrieve	(**T**)	5
InterBase	(**T**)	2
Linux / X-Windows	(**A**, **O**)	9
Silicon Graphics IRIX / X-Windows	(**A**, **O**)	5
Windows 3.1 / -95 / -98 / -2000 / -NT / -XP	(**A**, **O**)	9
BeOS	(**A**, **O**)	4
AmigaOS / hardware programming	(**A**, **O**)	7
DOS	(**A**, **O**)	2
HP-Unix	(**O**)	1
Alias|Wavefront PowerAnimator	(**3D**)	7
Alias|Wavefront Maya	(**3D**)	8
LightWave 3D	(**3D**)	6
Real 3D	(**3D**)	6
SoftImage 3D	(**3D**)	3
3D Studio MAX	(**3D**)	3
Blue Moon Rendering Tools (a.k.a. BMRT)	(**3D**)	9
PhotoShop	(**2D**)	8
Fractal Design Painter	(**2D**)	5
Deluxe Paint	(**2D**)	7
EGS-Paint	(**2D**)	1
Art Department	(**2D**)	4
Morph Plus	(**2D**)	2
ImageFX	(**2D**)	1
Sequitur	(**M**)	8
Bars and Pipes PRO	(**M**)	8
Sonix	(**M**)	8

Human Languages

Laguage	Skill level
English	Read, write, understand, speak *fluently*
Danish	Read, write, understand, speak *fluently* - my mother tongue
Northern Jutish (Danish dialect)	Understand, speak *fluently* (not really a written language)
Modern Greek	Read, write, understand, speak *fluently*
French	Read, write to some extent, need practice for serious communication
German	Read, write to some extent, need practice for serious communication
Swedish	Read, understand - because it's very similar to Danish
Norwegian	Read, understand - because it's very similar to Danish