

# Curriculum Vitae

## Personal information

Name: **Christian Brunschen**  
Address: 42 Willington Road  
London, SW9 9NE  
United Kingdom  
Phone: +44 (0)20 – 7738 7566  
Mobile: +44 (0)7811 – 33 06 35  
Email: [christian@brunschen.com](mailto:christian@brunschen.com)  
Date of Birth: 1971-05-03  
Nationality: Federal Republic of Germany

## Employment

2006-06-04 – current

Google UK Ltd. ([www.google.co.uk](http://www.google.co.uk)) (most recent first)

*Location (Android)* – Architect, design, implement, test, monitor software running as part of Google Play Services on Android, including continuous on-device tests across different hardware types and Android OS versions.

*Google Beacon Platform* – Architect, design, implement, test and monitor software in various aspects of [Google's Beacon Platform](#), including storage (migrating from one underlying storage system to another with zero downtime), service APIs (as used by first- and third parties to access the platform's services); automated testing applications (on Android) for Bluetooth Beacons (to verify adherence to specifications); Android applications to facilitate and manage large-scale beacon deployments, as well as data collection for performance measurement and analysis (including using [Project Tango](#) for spatial data and Augmented Reality).

*Google Offers* – Architected, designed implemented (end-to-end, storage-to-mobile client) an offer discovery and distribution system (part of an award-winning campaign); iOS and Android applications and libraries supporting Offers functionality in separate apps and integrated into others.

*Mobile Applications Engineering* – Design and implement mobile client software for some of Google's customer-focused services, for Android (Java) and iPhone/iOS (Objective-C / C++). Working closely with the development teams for those services to ensure cooperation between the client- and server-side software.

*Advertising* – Designed and implemented high-volume customer-facing and customer-supporting web- and server applications.

*Internal Systems* – Designed and implemented internal applications that serve various of Google's teams throughout the world.

Overall I've worked in a number of positions in teams of different sizes and shapes, from solo designer and implementer to working as a part of a team of dozens, in a sub-team of about ten, including design, architecture, implementation, testing, and deployment.

Google is an internationally renowned leader in internet searching, advertising, applications, and much more.

2001-05-01 – 2006-06-02

British Broadcasting Corporation – BBC News Interactive ([news.bbc.co.uk](http://news.bbc.co.uk))  
Designed, developed, deployed and maintained high-volume Content Management and Publishing Systems (using WebObjects, XML, SOAP, server-side Java, Oracle, JMS), as well as various supporting tools including monitoring, statistics gathering and processing and system configuration (also WebObjects, Oracle and MS SQL Server). Designed, developed and deployed Web server modules and configuration for high-volume web servers (Apache modules, C and Perl).

The BBC is probably the most highly respected provider of news on the internet. While at BBC News Interactive I have worked with various aspects of the production and delivery of the news content that makes BBC News so successful. In the process I have worked on teams of varying sizes, as well as working solo.

2000-10-10 – 2001-03-27

AMS Management Systems UK ([www.ams.com](http://www.ams.com))  
Designed and developed Web Applications using WebObjects (server-side Java, client-side Java & JavaScript). Trained and mentored other team members

While at AMS, I worked in a large team of developers and business analysts, analysing and clients' requirements as well as implementing them using Apple's WebObjects toolset using Java. In this role I also trained other team members in advanced aspects of WebObjects development, as well as mentoring new team members. This gave me valuable insights into working in a large team effort, where different parts of the team parts (business analysts, developers) work on different aspects, which nevertheless must work smoothly together.

1999-08-02 – 2000-09-29

P & L Systems International, Ltd., Amersham, UK ([www.plsys.co.uk](http://www.plsys.co.uk))  
Designed and developed desktop applications for OPENSTEP and Mac OS X in Objective-C, web applications using WebObjects (server-side Java, client-side Java & JavaScript). Trained software developers (I am a certified Apple WebObjects trainer, *Programming WebObjects 1* and *Programming WebObjects 2*). Managed technical software development projects.

At P&L Systems, I started out developing applications for Apple's OpenStep and Mac OS X operating systems, as well as developing web applications using Apple's WebObjects tools in both Java and Objective-C. I also assumed training duties (and was certified to give Apple's official *Programming WebObjects 1* and *Programming WebObjects 2* courses), where I honed my verbal and presentation skills. I later went on to manage a small technical team of developers on larger-scale WebObjects projects, which also meant interacting with the client on both technical and management levels to gather requirements, assess technical feasibility and plan development schedules. This taught me much about working in a project from a higher-level point of view as well as further sharpening my skills at interacting with clients and management in general.

1997-1998\*

Gravity Interactive Communication AB, Malmö, Sweden ([www.gravity.se](http://www.gravity.se))  
Designed and developed software & web sites (examples: web-accessible timetable & ticket ordering system, People & Location scheduling & tracking system). Administered client and server computer systems.

1995-1996\*

MacMeckarna AB, Malmö, Sweden ([www.mm.se](http://www.mm.se))  
Designed and developed software & web sites (example: Teletext-to-www translator, [www.svt.se/texttv/](http://www.svt.se/texttv/)). Administered client and server computer systems.

Summer 1994\*

Axis Communications AB, Lund, Sweden ([www.axis.com](http://www.axis.com))  
Designed and developed an automated testing system for development hardware (network print servers).

1992-06-01 – 1992-09-14

AB Tetra Pak, Lund, Sweden ([www.tetrapak.com](http://www.tetrapak.com))  
Continuation of previous year's work (see below).

1991-06-10 – 1991-08-18\*

Tetra Pak Research & Development AB, Lund, Sweden ([www.tetrapak.com](http://www.tetrapak.com))  
Developed software to allow device access using TCP/IP, Generated reports using embedded SQL for a plant automation project.

Fall 1990

NoGyS AB, Lund, Sweden  
Developed map digitizing software and printer drivers for GIS system

\*All work for MacMeckarna AB and Gravity Interactive Communication AB, as well as additional work in conjunction with my employment at Tetra Pak Research & Development and Axis Communications, was performed as an employee of 'AB MXM – Third Millennium Technologies', a company started in 1991 by a group of friends (including myself), in which I am a part owner.

## Education

### Higher Education

September 1999

Presented my M.Sc. Thesis, 'OdinMP/CCp – a Portable Compiler for C with OpenMP to C with POSIX Threads', first at Lund Institute of Technology and then at the 1999 European Workshop on OpenMP (EWOMP'99, <http://www.it.lth.se/ewomp99/>); available at <http://www.brunschon.com/christian/OdinMP/>

Fall 1989 - 1999, with interruptions

Datateknik, Datatekniksektionen vid Lunds Tekniska Högskola, Lund, Sweden  
Master of Science programme at the Department of Computer Science and Technology at Lund Institute of Technology, Lund, Sweden  
Complete list of courses and results attached

### Primary & Secondary schools

Fall 1986 - Spring 1989

Polhemskolan, Lund Sweden

Spring 1984 - Spring 1986

Tunaskolan, Lund, Sweden

Fall 1983

Georg-Büchner-Gymnasium, Berlin, Germany

Fall 1977 - Spring 1983:

Käthe-Kollwitz-Grundschule, Berlin, Germany

## Skills

### Programming and Computer-related skills

Programming languages, primary:

Java, C, C++, Objective-C, Python, PostScript

Programming languages, secondary:

Perl, Pascal, Simula, Miranda, Logo, Lisp, Prolog

Computer systems, primary:

Mac OS X, Linux, Microsoft Windows, Solaris and assorted other Unices

## Language skills

Fluent (spoken, read/written):  
Swedish, German, English

Semi-fluent:  
Danish, Norwegian

Basics:  
French

## Other Work-related skills

Training:  
Certified Trainer for Apple's 'Programming WebObjects I' and 'Programming WebObjects II' courses

Technical Project Management:  
Managing small team of programmers (5 people including myself), liaising with company management, subcontractors and clients

## Miscellaneous skills and interests

Typing:  
Rather fast, and pretty accurate – a side effect of typing a lot while programming etc.

Sports:  
Gliding. I gained my Glider Pilot's License in fall 2003.

Music:  
Playing the piano and related keyboard instruments  
Singing (choir)  
Composing and Recording (Sample available on request)

Literature:  
Science-Fiction and Fantasy, reading and writing

## Open Source Projects

MorphPlot  
<https://github.com/cbrunschen/MorphPlot>  
Plots arbitrary images on pen plotters, using binary morphology. Also calculates discrete voronoi diagram for stippling greyscale images, uses 2-opt to create a Hamiltonian path.

SMILEmu  
<http://smilemu.org/>, <https://github.com/cbrunschen/SMILEmu>  
An emulator for an early (1950s) Swedish computer, [Siffer-Maskinen I Lund](#) aka SMIL.

## Miscellaneous Accomplishments

October 2000  
The article about my Master Thesis was published:  
*C. Brunschen and M. Brorsson, OdinMP/CCp – a portable implementation of OpenMP for C*, *Concurrency: Practice and Experience*. 2000; 12: 1193-1203. ISSN 1040-3108.

September 1999:  
Presented my Master Thesis at the first European Workshop on OpenMP, (see also the article published in October 2000, above)

October 1996:  
Co-author of PNG specification ([www.w3.org/TR/REC-png-multi.html](http://www.w3.org/TR/REC-png-multi.html))

1992-1995:

Member of the board of the Computer Society at Lund University and Lund Institute of Technology ([www.dflund.se](http://www.dflund.se)), in various capacities:

- 1992-12-02 – 1993-05-05: Member of the board
- 1993-05-05 – 1994-05-07: Secretary of the board
- 1994-05-07 – 1995-10-31: System Manager

## References

Available on request.

Ladok printout (courses passes with their respective grades)

**Christian Brunschen, 710503-4271**

**Courses in Computer Science and Engineering, 180 p (TDATA)**

<b>Code</b>	<b>Name</b>	<b>Points</b>	<b>Grade</b>	<b>Date</b>
EDA010	Computer Programming 1	5.0	5	1990-05-30
EDA020	Computer Programming 2	4.0	5	1990-10-24
EDA030	Object Oriented Programming	4.0	5	1991-06-16
EDA040	Concurrent Programming	4.0	4	1993-12-18
EDA050	Operating Systems	3.0	5	1994-05-30
EDA100	Introduction to Computer Science	3.0	5	1990-05-28
EDA120	Functional Programming	4.0	4	1996-12-06
EDA200	Compilers and Interpreters	4.0	5	1994-06-22
EDA300	Computers in Society	2.0	G	1990-12-21
EDA320	Program Design Project	3.0	G	1991-09-13
EDA331	Programming in Industry	3.0	G	1996-03-08
EDA401	Numerical Analysis	4.0	4	1995-10-17
EDI010	Switching Theory and Digital Design	6.0	3	1993-08-23
EDI021	Digital Systems, Project Laboratory	5.0	G	1996-03-08
EDT010	Introduction to Computers	2.0	5	1990-03-08
EDT021	Computer Architecture	4.0	3	1993-10-19
EDT041	Introduction to Structured VLSI Design	4.0	G	1994-10-22
EDT100	Parallel Computer Architecture	2.0	5	1995-03-06
EEM010	Electrical Measurements and Instrumentation	6.0	3	1994-12-14
ETE030	Elementary Circuit Theory	4.0	3	1993-03-16
ETI090	Electronics, Basic Course	5.0	4	1993-12-16
ETS020	Communication Systems	4.0	4	1995-05-27
ETS031	Software Development for Large Systems	4.0	5	1994-10-20
ETS051	Computer Communications	4.0	4	1994-12-19
ETT020	Telecomm Theory, Discrete Time Circuits and Signals	4.0	4	1994-03-07
ETT030	Digital Transmission Systems	4.0	3	1994-06-02
FAF100	Physics	10.0	4	1990-06-20
FFF080	Semiconductor Physics	3.0	5	1994-12-16
TNX160	History of Technology	3.0	3	1995-12-06
ETS060	Discrete Event Simulation	4.0		
0193	Laboration 1 (*)	0.0	G	1996-05-03
FMA010	Mathematics, Extended Course	26.0		
0189	Calculus 1, Variable, Part 1	4.0	G	1989-10-23
0289	Calculus 1, Variable, Part 2	4.0	G	1995-12-09
0389	Calculus 1, Several Variables	4.0	G	1993-03-17
0489	Linear Algebra	3.0	G	1989-12-16
0689	Linear Systems	6.0	G	1990-12-21
		Total:	138.0	points

---

**Other courses**

<b>Code</b>	<b>Name</b>	<b>Points</b>	<b>Grade</b>	<b>Date</b>
TNE050	Internet Inside	3.0	G	1998-06-12
		Total:	3.0	points

---