



born 24/07/81

phone +44(0)7962-180080

email [chris@nashnet.co.uk](mailto:chris@nashnet.co.uk)

web <http://www.nashnet.co.uk>

address St. John's College,  
(main) University of Cambridge,  
Cambridge CB2 1TP, UK

(work) Computer Lab,  
William Gates Building,  
15 JJ Thomson Avenue,  
Cambridge CB3 0FD, UK

## about chris nash

### general information

#### computer experience (selected)

**ARCHITECTURE** hardware, networks inc. BackOffice/Server, drivers, storage, media, multimedia, energy-efficient systems.

**OPERATING SYSTEMS** DOS, Windows (all versions, inc. mobile), Unix (Solaris) & Linux (various distros), MacOS/OSX.

**PROGRAMMING** C/C++, Java (Std. & RT), Pascal, Ada (83/95), Lisp, OpenGL, Win32, MFC, VB (3-.NET, VBA), VS (6-.NET 2008), Cocoa, XCode, databases, SQL, regular expressions, DSP, x86/64 optimisation, threading, MSAA, mobile development, UI design, debugging, user testing, CVS, SVN, accessibility support.

**INTERNET** HTML, ASP, ASP.NET, ODBC, CSS, Javascript, VBScript, Flash, libCURL, database management, data visualisation, intranets, Frontpage, Dreamweaver.

**GENERAL** MS Office, 3D Rendering inc. 3DSMAX (+ Character Studio), Film/Anim inc. Premiere, After Effects, VirtualDub & Codecs, Graphics inc. Corel DRAW, Paint Shop Pro and Photoshop (+ others), Music inc. Cubase, Logic & Sound Forge.

#### general skills

- Communication
  - speech/paper writing, public speaking
- Academic
  - research, teaching, student supervision
- Creativity
  - composing, audio production, live sound, DSP
  - graphic design, video production, animation
- Teamwork, leadership, organisation, planning
- General troubleshooting, lateral thinking
- Near-fluent in German.



*"My perfect weekend would begin in Cambridge, composing a master-work in the morning, then recording it at Abbey Road in the afternoon, and finishing the day with friends and a pint in Dublin (or 568ml in Hamburg). On Sunday, there'd be time to travel to every city in Europe, learn all of their 200 languages, pay off third world debt from the change in my pocket, see in a new era of world peace and still find time for a game of cricket (weather permitting; else squash or badminton)."*



#### primary school

Heron Way, Horsham, West Sussex

#### secondary school (GCSEs)

Tanbridge House, Horsham, West Sussex

#### results

<b>Maths</b>	A*	<b>German</b>	A
<b>Science</b>	A*/A*	<b>Geography</b>	B
<b>English Lit.</b>	A*	<b>English Lng.</b>	B
<b>Design Tech.</b>	A	<b>Music</b>	B
<b>History</b>	A		

## about chris nash

### Education 1

- o UK Senior Maths Challenge
  - Silver ('97), Gold ('98)
  - School Vaedictorian ('98)
- o Schofield Prize for Maths ('97)
- o Prize for Excellence ('97)
- o Prefect & Sr. IT Prefect ('96/97)
- o Midland School Bank
  - Cashier ('96), Manager ('97)
- o Violin & Theory (Grade 5)
- o Piano (Grade 6 equiv.)
- o ASDAN Gold Award
- o York Uni European Society
  - Press & Publicity Officer ('99/00)
- o York Uni Composer Society
  - Founder / President ('00/01)
- o Cambridge University Royal Navy Unit
  - Officer Cadet ('06), Midshipman ('07-)
- o St.John's College Comp. Sci. Society
  - Graduate Liason Officer ('07-)
- o St.John's College Graduate Cricket
  - Player ('07-), Captain ('08-)

#### scholarships and professional bodies

- o Industrial Sponsorship ('06-09)
- o Wingate Scholarship ('07-'09)
- o MCPS ('03-), IMRO ('03-)
- o Cambridge Philosophical Society
  - Fellow ('07-)

#### college (A-levels)

The College of Richard Collyer, Horsham

#### results

<b>Maths</b>	A	<b>Physics</b>	B
<b>Fthr. Maths</b>	B	<b>Art &amp; Design</b>	A
<b>Gen. Studies</b>	B		

#### higher education (degrees)

University of York ('99-'02)

**BEng 2:1 Computer Science**

Trinity College, Dublin ('02-'04)

**MPhil 1st<sup>1</sup> Music & Media Tech.**

University of Cambridge ('06-)

**PhD<sup>2</sup> Computer Science & Music**

<sup>1</sup> first in class   <sup>2</sup> currently finishing

#### additional qualifications

- o City & Guilds COMEC Leadership award ('10)



## Research Activities (selected)

### MIVI (Musical Instrument Visual Interface)

Project for BEng Computer Science, York

For more info: <http://mivi.nashnet.co.uk>

MIVI is a software application that takes a MIDI input and uses it to generate real-time, visually-accurate 3D simulations of real-world musical instruments in OpenGL, for use in music tuition.



## about chris nash

### Education 2

### reViSiT / VSTrack (Tracking Software for VST Hosts)

Project for MPhil Music & Media Technologies, TCD;

and PhD in Computer Science and Music, Cambridge

For more info: <http://revisit.nashnet.co.uk>

Initially, an exploration of "soundtracking" software, citing potential benefits over more commonplace MIDI sequencing approaches, with regards to sonic expressivity and interface efficiency; leading to a best-of-both-worlds solution, in the form of VSTrack: a soundtracker application that runs as a VST-plugin, slaving to a sequencer host (such as Steinberg Cubase). Due to the success of the endeavour, VSTrack's development now continues, as "reViSiT" - drawing upon the support of an online community of 1000's of musicians and coders; underpinning a wider study (PhD) looking into creativity, skill and flow in computer music.



### Press Coverage

*DTM* magazine (Japan)  
(Jan'07 #151 and Sep'07 #159)

*Computer Music* magazine (UK)  
(Top 50 Freeware / Top Tracker, Special  
May'07 and "Trackers!" Cover Story Jun'07)

*KEYS* magazine (Germany, Jul'07)

*Estrada I Studio* magazine (Poland)  
(Apr'07, Jul'07 and Oct'07)

### Published Articles (selected)

"Realtime Representation and Gestural Control of Polytempi" in *Proceedings of NIME Conference 2008*

"Designing Computational Tools for Creativity, Flow and Mastery" in *Proc. of IEEE VL/HCC Conference 2010* (in press)

"Liveness in Notation Use: from Music to Programming" in *Psych. of Programming Interest Group (PPIG) 2010* (in press)



Jan'09 - Jul'09 / RESEARCH INTERNSHIP

**Steinberg Media Technologies**

Neuer Hölftigbaum 22-32, 22143 Hamburg, Germany

Research & development: the integration of cross-platform accessibility support into the Steinberg code libraries, and development and testing of prototype support for visually-impaired users of *Sequel* sequencer.



Nov'04 / COMMISSION

**Bedman Ltd**

Baseline Studios, Whitchurch Rd, London W11 4AT

Musical commission: the production of music for a national TV advert, for Optimax Laser Eye Clinics. (Genre: House / Trance)

## about chris nash

### Employment 1



Oct'04 / COMMISSION

**Trinity Access Programme**

Trinity College, Dublin 2, Ireland

Musical commission: composition and production of a 45-minute musical presentation (on Audio CD), showcasing interviews with TAP students, to celebrate "100 Years of Women in Trinity". (Genre: Electronica)



Aug'04 - Oct'06 / CONTRACT

**Russell Ambrose**

128 Finchley Road, London, NW3 5HT

Software and web development: the continued development of *keyPlay* (v2-v3). Extending the application to provide intuitive music editing and interactive playback facilities. Development and launch of an online database, for the uploading, searching and sharing of *keyPlay* music.



Jul'02 - Jul'04 / PART-TIME CONTRACT<sup>1</sup>

**Russell Ambrose**

128 Finchley Rd, London, NW3 5HT

Software development: the development of *keyPlay*, a music notation application, designed to import MIDI files and present them in a proprietary notation format (for display and printing), targeted at beginning pianists. Including deployment packaging and support files (online help, etc.).

<sup>1</sup> conducted during studies



Jan'02 - Feb'05 / FREELANCE

**Godfreys Mazda**

Worthing Road, Southwater, Nr. Horsham, RH13 7HA

Technical support: recovery from various hardware and software problems resulting from poor third-party computer maintenance. Web Design / Programming: continuing development of an easy-to-use online-administrable dynamic website.



Oct'03-Nov'03 / CHARITY COMMISSION

**Ballymun WRC**

10 Silogue Road, Ballymun, Dublin 11, Ireland

Musical commission: working with kids in the deprived Dublin suburb of Ballymun, recording the sounds of their neighbourhood, then taking them away and using them to create a musical presentation. Presented at *The Axis*, Dublin. Subsequently used in the BBC drama series, *55 Degrees North*. (Genre: Electronica)



Winter'01 - Sep'06 / CHARITY

**becauseitsfootball.com / 23sweetfas.com**

Contact details available on request.

Website design: development of a high-profile website, charting the progress of a small band of football fans on a sponsored march to the World Cup in Korea/Japan... with a tablefootball table.



Dec'00 - Jan'02 / BUSINESS

### **nashNET**

2 Smithbarn, Horsham, W Sussex RH13 6EB

With the founding of nashNET, I gained extensive experience across multiple disciplines, including project management, finances and accounts, customer services, VAT, legal matters and, through membership of the York Chamber of Commerce, social networking and business presentations.

In 2002, the business was closed, to allow me to focus on my studies. nashNET, though young, had enjoyed blossoming success in the industry and was a name quickly spread by many satisfied clients, including...

## about chris nash

### Employment 2



#### **BT Group**

Aut'01 / CONSULTATION

Consultation on technology procurement and information management.



#### **SuMMIT HR**

Sum'01 / CONTRACT

Consultation and design brief for forthcoming website, plus technical support.

n/a

#### **York Business College**

Spr'01 / CONSULTATION

Technical support and consultation on current and emerging web technologies.



#### **Godfreys Mazda**

Spr'01 - Aut'01 / CONTRACT

Development of a program for employees to manage content on static websites.



**J.M.O'Neill** (town planning consultants)

Spr'01 / CONTRACT

Design of a new corporate website.



**GSPK** (engineering group) / **Intalace** (IT)

Win'00 / CONTRACT

Creation of prototype e-commerce website for instant quotes for custom-PC systems.

### previous work



**edox** (management information) Sep'00

Coding a database system for logging support calls.



**buyforbusiness.com** Mar/Apr'00

Design of e-commerce site for office equipment sales.



**partX.com** May'99-Jun'99

Coding of Java applet to support database searching with no server-side support, plus tools for offline admin.



**Timber Trade Federation** Apr/May'99

Production of sample designs for the TTF website.



**Dorling Kindersley** Mar'99-Oct'99

Telephone customer service / support.



**BT Employee Comms Unit**

Aug'97-Sep'97 / Dec'97-Jan'98

Software Development: program to collect feedback from roadshow guests. Web Design: sample designs for a proposed BT Intranet facelift. Intranet Development: online business travel and expense booking service. Web Design: BT's internal Industrial Relations site.



**BT Data Provision Unit**

Dec'96 (WORK EXPERIENCE)

Data extraction & manipulation, with SQL server.