

## CV: Tim Hawkins

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London & Swansea

### Intro

I'm a developer working across a range of technologies and platforms, with some emphasis on client-side web UI and HMI. I can take on whole projects, potentially at fixed cost, or for larger jobs am happy to step into a team-lead role. If requirements or strategies are fuzzy I can act as a consultant to help make them clearer.

My approach is opinionated but pragmatic; I have a love for elegant solutions, high attention to detail and am a tireless advocate for best practice, however I can see problems from multiple perspectives and understand that business needs outweigh all others. A low-budget startup needs a lighter process than an already-mature application, perfect is the enemy of good. Regarding Agile, my belief is that we can mix and match techniques and tools, there's no need to be dogmatic.

I've experienced a large number of projects in a broad range of industries, am comfortable using any mainstream high-level object-centric language and have well-developed instincts regarding architecture, code quality and overall impetus. Due to this I'm confident giving technical direction and guidance, and thus get a lot of satisfaction when I can provide mentoring and leadership.

Android projects are of particular interest to me at the moment, I have a good level of competence there now and would like to get involved in some larger apps.

### Jobs

#### Limelight Sports

Contract | Spring 2014  
Android, Java

Development of the "Swim Britain" app on Android, for British Gas. I worked as part of a team on a tight schedule in the final month before delivery, dealing mostly with user interface implementation.

#### Easel TV

Contract | London | Spring-Summer 2013, Winter 2013/14 - Summer 2014  
HTML5, JavaScript, ActionScript 2, Python, Scala

A number of projects for the TiVo set top box, in HTML/JS (Opera Presto) and Flash. These are mostly video-on-demand apps for well known media companies using Easel's own SuggestedTV platform, and also some maintenance and improvement work on legacy software such as the Spotify app. We dealt directly with Virgin Media and TiVo engineers in cases where advanced functionality (Spotify audio, red button, new video formats) was required.

#### Symphony Teleca

Contract | Winchester | Summer 2012 - Winter 2012/13  
ActionScript 2, ActionScript 3, C++, C#, FlexUnit, Source Depot, PowerShell, TFS

Maintenance and development on a vast legacy in-car system, mostly focusing on the touch-screen HMI but also delving into OS services and creating/using tools for investigation and debugging. This involved working closely with the end clients (a pair of well-known American companies; software and automotive) and their other vendors over multiple disparate time zones.

Due to the nature of the project and the large number of concurrent contributors, a process applying elements of Scrum and Kanban was followed, with code review and formalised testing required for each changeset.

*In short, I did*

ANALYSIS  
ARCHITECTURE  
BUG TRIAGE COLLABORATION  
DEBUGGING DESIGN  
DOCUMENTATION  
ESTIMATION KANBAN  
MENTORING OPTIMISATION  
PORTING PROFILING  
PROGRAMMING  
REFACTORING SCALABILITY SCRUM  
SERVER CONFIGURATION  
SPECIFICATION TDD  
TEAM LEAD TESTING  
USABILITY

*using*

ACTIONSCRIPT  
ANDROID AWS BROWSERIFY  
C# CSS FACEBOOK FLASH FLEX  
FLEXUNIT GIT GRUNT GULP  
HTML JAVA  
JAVASCRIPT JQUERY JSON  
MVVM LIGHT MYSQL NODE.JS  
PAPERVISION PERL  
PHOTOSHOP PHP POWERSHELL  
PYTHON REQUIRE.JS RUBY SCALA  
SILVERLIGHT SOURCE DEPOT  
SQL SERVER SVN TFS UML  
VB6 WOWZA XAML XFORMS  
XML XML SCHEMA

*for*

2FOLD2OPLAY 3T BBC  
BRITISH GAS BRITISH MUSEUM  
CHEVROLET CIMEX CTAD  
CURZON DISNEY DNX DYSON  
EASEL TV EHS BRANN  
FORD FRIENDS OF ED HP  
HMX MEDIA IMAGITECH ING  
IRIS JAGUAR LAND ROVER LBI  
LIMELIGHT SPORTS  
MAX & CO MICROSOFT  
NBCU NEXUS NIKE NYK  
PUBLICIS RED BULL RACING  
REHAB STUDIO RIO TINTO  
SKILIO SKY SPOTIFY  
SWANSEA UNIVERSITY  
SYMPHONY TELECA TIVO  
TOPTABLE UNILEVER  
VALUE RETAIL VICTORIA REAL  
VIRGIN MEDIA WHEEL  
WILLIAMS

## 2fold2Oplay

Contract | London | Winter 2011/12

Java, PHP, ActionScript 3, RobotLegs, AWS

Worked on early versions of a Facebook game, involving capture and processing of user audio and video content. I set up Wowza on Amazon EC2 instances and wrote a custom module to capture and record streams and sidecar data files to a queue on S3 storage, along with some PHP (using ffmpeg and sox) on a cron job to generate final videos and upload them to YouTube using previously stored user credentials. I also created some UI components in ActionScript for the front-end.

## Rehabstudio

Contract | London | Autumn 2011

ActionScript 3, RobotLegs

Short project leading a team of 5 developers to create a microsite for a large automotive company. We used the RobotLegs framework and closely followed company coding guidelines allowing a smooth handover to staff on completion.

## Skilio

Contract | Spring-Summer 2011

ActionScript 3, Java, PureMVC

Skilio.com is a fledgling social network based around skill sharing. I architected and built their core multi-user video conferencing and real time information sharing application consisting of a Flash front-end and multiple Wowza media servers. The client is AS3 using the PureMVC framework and the Wowza modules are written in Java. Sessions can be recorded in full and played back later.

## Imagitech

Contract | Swansea | Summer-Winter 2010

Silverlight 4, XAML, C#

Imagitech develops Driving Test Success, the UK's leading series of products for learner drivers. Having decided they wanted to use Silverlight to create the new online version of DTS, they got in touch and asked if I'd be prepared to build the client application based on my previous good work for them in Flash. I'm always happy to learn something new, so I immersed myself in documentation and discussions for a couple of months until I was ready to do the job justice. The basic architecture is MVVM (using MVVM Light), connecting to a WCF web service and using Smooth Streaming for instructional video and hazard perception tests.

## Toptable

Contract | London | Winter 2009/10

ActionScript 3, XML, JavaScript

Created a white label reservation panel for client restaurants to put on their own sites, allowing bookings to be made through Toptable's existing systems. I put together a user-friendly and lightweight panel in Flash which site owners can embed and customise with JavaScript, allowing visitors to check availability and make bookings via XML REST services. Very straightforward theming capabilities make it simple to integrate into existing designs.

## BSkyB

Contract | London | Autumn 2007, Autumn 2009

ActionScript 2, ActionScript 3, PHP, SQL, XML

Interactive election map application for Sky News. Key features included a detailed and fully zoomable vector-based map, a quick constituency searching & sorting tool, intelligent data loading to increase responsiveness and a full-screen mode. Subsequently I helped out with a few other things including making a quick SQL and PHP based voting system for their "Charity Search" site.

In September-October 09, I returned to put together a Flash microsite for a movie channel.

## EHS Brann

Contract | London | Spring-Summer 2009

ActionScript 3, XML, XForms, XML Schema

Development of an extensible forms renderer based on a subset of the XForms standard, for use on web sites for Jaguar/Land Rover and in possible future projects. This was quite tricky and involved a partial implementation of XML Schema in order to derive type information from the prescribed XML document format.

## BBC World Service

Contract | London | Autumn 2008

ActionScript 3, HTML, CSS, JavaScript, jQuery, PHP

A system to display election results in real-time in multiple languages and exotic character sets over several different World Service sites using XML feeds from BBC News. Plain HTML versions of pages were generated at intervals by a PHP script which also uploaded them to the relevant live web servers, and jQuery was used on page load to dynamically reorganise the structure into a HTML format and incorporate an interactive Flash map for users with the correct plugin installed. The page auto-refreshed at intervals.

## LBi

Contract | London | Spring – Autumn 2008

ActionScript 3, PureMVC, Papervision 3D

ActionScript 3 projects using the PureMVC framework and Sprouts: An unusually subtle and elegant dynamic 3D environment using complex Collada models for Unilever, a 3D carousel for Sony, various flash components for the Red Bull Racing and Toro Rosso team sites, and I helped to develop the “Eco-Rangers” game for Centrica.

## Cimex

Contract | London | Spring 2008

Flex, ActionScript 3

A few Flex 3 components using AS3 and MXML for a larger Cairngorm application.

## Iris

Contract | London | Early 2008

ActionScript 3, XML

I spent a few weeks as part of a team developing a site to showcase ING's sponsorship of Formula 1.

## Nexus Productions

Contract | London | Winter 2007

ActionScript 2, ActionScript 3, Papervision 3D, XML

Implementation of a kaleidoscopic video effect for a POS display in Nike's shop in Oxford Street. Nexus had already designed and created a number of video sequences with a particular look and feel. My role was to reproduce some of these dynamically using code so graphic elements within them could be altered at runtime based on live data from another application.

Also R&D on a viral 3D pitch with AS3 and Papervision 3D – with a view to combining pre-rendered video from 3DS Max with dynamic content.

## Imagitech

Contract | Swansea | Spring-Summer 2007

ActionScript 2, JavaScript, XML

Development of a modular web-based driving related test system (“Roadmarque”), aimed at businesses who want to assess their mobile workforce in line with some recent legislation. A core application and a number of widely varying (e.g. hazard perception, coordination/reaction and psychometric) test modules were created and hooked into a server side app using XML.

## Victoria Real

Contract | London | Summer 2006 – Spring 2007

ActionScript 2, Photoshop, Ruby, XML

Flash development on several projects using open source tools (Eclipse, MTASC, SwfMill); various online games (prototypes and final builds) and components for clients ranging from the BBC to Williams and Ladbrokes.

## Cambridge Training & Development

Contract | Cambridge | Summer 2005 – Spring 2006

ActionScript 1, ActionScript 2, XML

Various projects in the e-learning field, including:

A modular educational app for PocketPC, to work in conjunction with an authoring tool and connect to a web server in order to synchronise tracking/scoring data. I used MTASC and SwfMill to build this AS2 application, and communicated with a custom-written C++ wrapper via XML sockets in order to achieve full local filesystem access.

A port of "Framegrabber" from Delphi to Flash. This is a tool that enables a learner to extract individual frames from a video and place them in a storyboard where they can be annotated, saved, printed or shared with others via a central repository.

## 3T

Contract | Manchester | Summer 2004  
ActionScript 2, XML

Work on two CD-ROM based educational products – one aimed at improving adult financial literacy and the other part of a suite of learning aids for teachers.

## Max & Co

Contract | Aberdeen | Summer 2003 - Spring 2004  
ActionScript 1, C#, SQL, VB6, XML

Creation and maintenance of the desktop client for the R2S crime-scene analysis / annotation system. Current end users include several police forces in the UK and around the world. A fuller description of the software can be found at [www.r2scrime.com](http://www.r2scrime.com).

Also a licensing system for the ASP-based server application in C#, which involved generation of a unique ID for each server and use of public-key cryptography to create and authenticate license files. I also learned and used just enough VB6 to write a wrapper allowing the use of a visual ActiveX control from within the Flash app.

## The British Museum

Contract | London | Summer 2003, Spring 2004  
ActionScript 1, HTML, Photoshop

Work for the Educational Multimedia Unit, using Flash MX to create various games and activities for the 'Ancient Civilizations' project.

## Friends of Ed

Contract | London | Autumn 2002  
ActionScript 1

I collaborated with Erwan Bezie to produce a chapter on scripted video masking for the FoE book "Flash Video Creativity".

## NYK

Permanent | London | Autumn 2001 – Spring 2003  
ActionScript 1, ASP, SQL, XML, C#

Part of a small team doing development on logistics (track & trace, cargo transloading, etc) applications for corporate clients such as Clarks and Tesco.

## View

Contract | London | Spring-Autumn 2001  
ActionScript 1, HTML

Creation of a dynamic XML driven map system for the Rio Tinto site, as well as several sites for the 'Value Retail' chain of shopping outlets.

## Dyson

Permanent | Malmesbury | Spring 2000 – Winter 2000/1  
ASP, Director, Flash, HTML, JavaScript, Photoshop

Work on web projects, CD-ROMs, POS Kiosk systems and interactive multimedia presentations.

## Swansea University, Education Dept.

Freelance | Swansea | Summer 1999 – Spring 2000  
HTML, JavaScript, Perl

Web design and development for the Department. Sites created included an experimental distance-learning PGCE course involving streaming video.