**Duncan Stirling BSc (Hons) MSc**

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**Nationality**: British

**Seeking**: permanent work 40k+ or a contract

**Location:** Preference for roles in/near Manchester city centre.

**INTRODUCTION:**

I have experience in a range of PHP MVC frameworks (Zend1/Zend2/ Symphony2/ Laravel) and JavaScript technologies with some exposure to Node.js/React.js. I have worked as a sole developer delivering entire projects and as part of a large team in an agile environment using Jira/Scrum.

I am looking for a predominantly back end full stack role with a modern open source tech stack, to include a PHP MVC frameworks, ideally Laravel, and modern JavaScript frameworks i.e. React/Node or similar.

I am currently at NQC, working on a project to replace <https://ted.europa.eu>, in the case of a no deal Brexit, so that the UK can have it’s own version of the EU tendering system for government contracts.

Previously, I worked as a contractor at BT Darlington. My role at BT involves working on the Symfony2 PHP based BT Market Place website which enables service owners within BT to promote and sell their services to other parts of the business. I developed the ‘How to’ section of BT Market Place, which assists service owners in publishing their service. I work in an agile team of six software engineers using Symfony2/Twig, JavaScript, Git, Doctrine and Jira, in a Linux environment.

Prior to my contract at BT, I was at Eseye for 5 years, where I designed and developed middleware systems for wireless technology applications. Notable projects included MKopa solar power projects in Africa, a system to provision sim cards on the Verizon network, monitoring software for Costa Coffee self service machines and DSTL.

**MAIN SKILLS:**

**BACKEND**

- PHP MVC frameworks experience

ZEND2 - 3 years (Zend2 Training, frameworktraining.co.uk, April 2015)

ZEND1 - 3 years

Symfony2 - 3 months (BT contract)

Laravel - 2 months

- Restful/SOAP interfaces with asynchronous callback (Verizon SIM provisioning API)

- ActiveMQ / RabbitMQ installed using Composer, used for middleware inputs/outputs

- MySQL, PHPMyAdmin / MySQL Work Bench

- Shell scripting (BASH)

- Cron activated procedures

- Simulating a PHP multithreaded system using forked child processes and IPC queue

- Website translations: ZEND2 Translator/Google translate

**FRONTENT**

- Javascript, JQuery/AJAX and recent learning Angular

- CSS/HTML

- XML

- VMWare

- Jira

- Google Analytics

**CODE MANAGEMENT**

- SVN/GIT

- IDE: ZEND Studio, Net Beans

- Log Rotate – to prevent accumulation of log files

- Jenkins – some exposure to this

**GIT HUB REPOSITORY:**

**Web page analysis code 2018/07/19**

View a working example: https://shirefresh.net/webPageAnalysisTestDuncanStirling.php

<https://github.com/duncanstirling/duncanstirling/blob/master/webPageAnalysisTestDuncanStirling.php>.

**Record keeping Zend2 code sample 2018/04/03**

View a working example: http://vistaweb.co.uk/index

<https://github.com/duncanstirling/duncanstirling/blob/master/Zend2RecordKeepingExample.zip>

**jQuery plugin 2012/04/23**

<https://github.com/duncanstirling/duncanstirling>

**PERSONAL PROJECTS:**

**internet dating site**

Mobile friendly dating site software, rebranded several times to create a network of sites i.e. singlegomingle.com, developed using a single code base and a range of domains pointing at it. Developed using Zend2 MVC framework (development ongoing).

**country life portal**

townandshire.com, developed using Zend1 MVC framework (development ongoing).

**EXPERIENCE:**

**11/2018 – todate developer at NQC, Manchester**

Currently working on a Government project to deliver a UK replacement for <https://ted.europa.eu>, to be implemented in the case of a no deal Brexit.

**07/2018 – Software Engineer at BT, Darlington,**

**3 month contract due to finish 10/2018**

I worked on BT Market Place website which promotes BT services within the company. I created the ‘How To’ guide which helps service owners publish their service and make it available to other parts of the business.

**2013 – 2018: Software Engineer, Eseye, wireless technology specialists (Guildford, Surrey)** [https://www.eseye.com](https://www.eseye.com/)

Developing a range of PHP full stack middleware projects for machine to machine applications using Zend1/Zend2/Laravel, JavaScript, Ajax, JQuery, CSS, HTML, ActiveMQ, RabbitMQ, Bash scripting. Projects included MKopa solar power projects in Africa, sim card provisioning systems to enable devices containing Eseye sims to work on networks in America (i.e. Verizon),The Good Night Lamp (featured in the Daily Mail), a project for DSTL and synchronizing the inhouse billing system with QuickBooks.

**2011 – 2013: PHP systems developer, Cara Technology, Specialists in brewing technology (Leatherhead, Surrey)** [http://www.cara-online.com](http://www.cara-online.com/)

Working as part of a team to develop sensory software for the brewing industry (i.e. SAB Miller), i.e. software used by tasting panels. I was a team member in an agile environment working with CodeIgnitor.

**2010: Drupal Developer at FD Systems, Cardiff**

I was hired to work on [www.britishbookshops.co.uk](http://www.britishbookshops.co.uk/), (company in administration, website removed), a bookshop chain established since 1938.

**2010: MIUK, Bury St Edmunds**

Main responsibility: using object oriented PHP to work on an in-house bespoke content management system. I also worked on projects for Fitz William College Cambridge

**2009: Estee Lauder: OO Perl contract**

Worked on producing an online returns procedure for use by Estee Lauder Companies, to enable customers to return items purchased in recent orders. The procedure automates much of the returns process currently done over the phone.

**2008 – 2009: Computer Programmer, Companies House**

Part of an agile 8 man team hired to implement the 2006 Companies Act, through further development of Companies House web based services (OO Perl) i.e. the collection of forms used to file a Annual Return for a limited company. I worked on the following websites: [Web Filing](https://ewf.companieshouse.gov.uk/), [Web Check](http://wck2.companieshouse.gov.uk/), [Companies House Direct](http://direct.companieshouse.gov.uk/). I was also the only Perl programmer to work on development of e-Proof, a scheme where companies are given an authentication code to protect against company hijack by criminals submitting false paperwork.

**2003 – 2007: Systems Developer, National Oceanography Centre, Liverpool**

Systems developer at the National Oceanography Centre, a public sector research laboratory (formerly the Proudman Oceanographic Laboratory, POL).

I was part of the numerical modelling team, for which I developed operational systems to run nested POLCOMS numerical models on a 192 processor IMB Xeon in-house cluster. I was also part of the web development team, developing interactive web pages for viewing model output online. <http://cobs.pol.ac.uk/modl/>.

POLCOMS has a strong international reputation. It is widely used in the scientific community and by operational agencies, such as the Met Office and Puertos del Estado in Spain, in the development of systems designed to meet the requirements of central and local government, and industry.

I worked closely with the Met Office, who is a major supplier of Meteorological data to NOC and a major funder of the modelling work done at NOC, to acquire forcing and boundary condition data to run the numerical models. I also participated in many other projects, both internally and externally, through the provision of code and data i.e. the EU Interreg project PRISM.

**While at NOC I developed and maintained the following pages:**

PHP web pages to display model output from Met Office oceanographic models

<http://cobs.pol.ac.uk/modl/>

PHP modeling pages to display output from nested Fortran numerical models run in-house on a 192 processor IMB Xeon cluster.

<http://cobs.pol.ac.uk/polcoms/>

PHP pages for displaying satellite data obtained from Plymouth Marine Laboratory.

<http://cobs.pol.ac.uk/cobs/sat/>

PHP pages to show local rivers that flow into the Irish Sea.

<http://cobs.pol.ac.uk/cobs/rivers/imagemaps/index.php?river=conwy>

(and similar links to the Dee, Mersey and Ribble)

I developed an animation for a Challenger Marine conference, showing dawn breaking over Hilbre Island

<http://cobs.pol.ac.uk/cobs/webcam/hilbredawn.html>

\*See sections lower down regarding NOC scientific skills and training

**2003: CONTRACTS:**

**Care Micro Systems, Scarborough: web developer**

Web developer: programming in PHP, MySQL, HTML and JavaScript to create commercial websites i.e. [www.squirescarpets.com](http://www.squirescarpets.com/) .

**Ryedale District Council: Occupational Therapy Department: database developer**

I worked with occupational therapists, maintaining a database to track the storage, distribution and return of medical equipment.

**Pindar Set Scarborough: IT help desk assistant**

Worked on an IT helpdesk for Pindar Set (printers of the Yellow Pages), handling queries from the UK, USA and India.

**2001 – 2002 FULL TIME EDUCATION**

**1999 - 2001 P&N Communications, Antwerp, Belgium: Junior Technical Writer**

Technical writing for business-to-business publications for multi-national companies: Philips Semiconductors, Vermeer International and CFS Food Packaging. Wrote ‘in-focus’ articles for Philips Semiconductors’ website and maintained their on-line microchip catalogue.

**1998 – 1999: Project Officer, Inland Waterways Assoc., Rickmansworth:**

Member of six man team whose principle aim was to analyze Local Environmental Association Plans (L.E.A.Ps) and compile a comprehensive report for the local authority listing any intended actions impacting navigation of the U.K. inland waterways.

**EDUCATION:**

**2001 – 2002 Hull University, MSc Internet Computing**

**1994 - 1998 Lancaster University: BSc (Hons) Environmental Science with Physics/Maths  
Year 2: 1 Yr. exchange: Iowa State University, USA**.

*Physics*: Quantum Physics, Electricity and Magnetism, Thermodynamics and Mechanics. *Mathematics*: Calculus: Three consecutive calculus modules

*Environmental Science (minor)*: Renewable Energy and the Environment.

**1992 - 1994** Queen Elizabeth 6th Form College, Darlington, 'A' levels: Maths, Physics, Chemistry

**1987 - 1992** Hurworth Comprehensive School: 9 GCSE's

**SKILLS USED IN SCIENTIFIC RESEARCH (NOC):**

**Perl:** cron activated scalable procedures to run FORTRAN models on a cluster

**FORTRAN:** processing large data sets i.e. working with model inputs / outputs

**shell (CShell / BASH):** scripts for submitting batch jobs to a PBS server and to generate images

**PHP:** developing web pages for interactive viewing of model output

**Parallel Programming**: worked with parallelised FORTRAN code to run jobs on a cluster and developed a subroutine to enable POLCOMS (numerical model) to write directly to NetCDF while running on the cluster

**Cron:** automated job scheduling to enable operational system development

**Matlab:** plotting model/observational data (http://cobs.pol.ac.uk/polcoms/validation\_sm/)

**Oracle:**working with real-time observational data from sampling sites i.e. river gauge data

**CF1 NetCDF:** standardizing FORTRAN based NetCDF archiving to enable collaborations

**Publication:** Stirling D. (2006), Routine POLCOMS Simulations for the Coastal Observatory: Initial Model Setups. NOC Internal Document #180.

**I represented NOC on three steering committees:**

Coastal Observatory steering committee (presented latest achievements in POLCOMS modelling). PRISM user group steering committee, Menai Bridge, Bangor (Predictive Irish Sea Modelling). CSAR user group steering committee, Manchester Computing (CSAR provides high performance computing services for the UK research community), I have also presented posters at oceanographic events

**Presentations:**

Coastal Observatory Steering Committee 03/2007: Latest achievements in POLCOMS modeling

Challenger Marine Conference 2006: poster presentation (co-author)

Physics of the Estuarine and Coastal Seas 2006: poster presentation (co-author)

NCOF Development Workshop 2006: poster presentation (author)

**SCIENTIFIC TRAINING COURSES (NOC):**

Software Engineering course: Object Oriented Analysis and Design using UML, Learning Tree (5 days) 19/01/2009 – 23/01/2009

Prince2 Project Management course (NERC JTS course 21/11/06 - 24/11/06)

ORACLE (GB Direct 5 day course 05/2006)

Matlab data processing workshop (28/02/06)

Distributed Resource Broker Workshop, NIEeS, Cambridge (10/01/06 - 11/01/06)

Presentation Skills course (NERC JTS course 01/12/05 – 02/12/05)

Scientific visualization workshop, NeSC, Edinburgh University (22/11/05)

Three parallel computing courses, Manchester University (25/10/05 - 27/10/05)

FORTRAN course, PTR Associates, Wokingham (23/05/05 - 27/05/05)

Communicating Science to the Public course (NERC JTS course 10/05/05 - 11/05/05)

e-science awareness workshop, Liverpool University (06/05/05)

Marine XML course, NIEeS, Cambridge (21/03/05 - 22/03/05)

Challenger Marine Conference 2004: poster presentation (co-author)

**REFERENCES:**

Available on request