Andrew Mark Johnstone

199 The Avenue, Highams Park • London, E4 9SD • +44 7595 334703 • andrew@ajohnstone.com

Objective
To develop and maintain multi-tiered, standards-based, cross-platform web sites and applications using open technologies such as XHTML, CSS, PHP, and .NET.

Skills
PHP 3, 4.x, 5.x
MySQL 3, 4, 5
Linux, Debian, Ubuntu
XHTML 1.0, 1.1 [Strict]
Jscript, JavaScript, JQuery
CSS 1, 2.0, 2.1
Visual Basic / VBScript
C#
XML / XSL (T)
SQL
COM
Sed & awk
Performance & optimization

Personal Traits
Team Player,
Hard Working,
Creative Thinker,
Perform well under stress,
Helpful,
Friendly,
Quick to Learn,
Detail Orientated,
Reliable, and
Self-Managed

Education
Highams Park G.M School, England
1994-1999

Epping Forest College, England
2000-2001

Overseas Family College (California State University), Singapore
2001-2002

Experience

Everlution: London November 2006 – Current
Lead Developer / System Administrator

I started at Everlution with a total of 3 staff members and has since grown to over 80 staff, I have been an integral key member of the team since I started. I currently support 80 staff members internally including a team of 25+ developers in the UK, 10 in the Ukraine, external clients and production servers. Working across all projects in terms of architecture, security, performance & optimization, infrastructure, peer reviews, mentoring, recruitment and development.

- *Devops/System administrator*
  - Managed 50+ servers geographically within EC2, Rackspace, NTT Verio, 1and1 and Bytemark within a devops capacity dealing with performance & automation with jenkins, puppet, slack and chef.
  - Implemented numerous monitoring solutions with mon, munin, pingdom, graphite, rkhunter, tripwire, logwatches, and have written numerous custom bash, perl, ruby, python scripts.
  - Implemented continuous integration and continuous deployment with jenkins, vagrant and slack/chef-solo/puppet.
  - Implemented custom load balancing with ucarp/haproxy and have worked with elastic load balancing, amazon s3, autoscaling.
- *Gorkana (Gorkana Database, Gorkana PR, Durrants, Metrica)*
  - Gorkana is a journalist and media outlet database within the UK & US, which we were contracted to rewrite their online system (the core of their whole business) from scratch 3 to 4 years ago. Gorkana Database is a large and complex system. With a dedicated team we managed to release within a 6 month period and have subsequently maintained and built on this functionality, greatly increasing the power and sophistication of the system. ®Gorkana was sold in April 2009 for £25M to Durrants, which was not possible with their previous in house team.
    - Responsible for
      - Gathering specifications and criteria.
      - Architecture and infrastructure
      - Performance and optimizations
      - Processes & deployment
      - Merging and migration into Durrants, Metrica and Gorkana.
      - Two teams of 5 developers each within maintenance & feature branch teams working within an agile/scrum environment.
    - Infrastructure
      - 6 web servers, 2 file servers, 2 mail servers, 4 database servers
      - Lang *(php, perl, python, c++, bash)*, web & lb *(apache, haproxy, ucarp)*, cache *(memcached, apc, mysql - materialized views)*, message queues (0mq, php/mysql), search (elastic search [lucene]), storage & database *(mysql, nfs, imap)*, email *(exim)*, monitoring *(munin, mon, bash),* frameworks *(Zend Framework)*
      - Cluster of MySQL database servers with 160GB of data per node and growing, 50gb of user uploaded content.

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Other Details

Operating Systems:
Windows 95, 98, 2000, ME, XP, 2003, Linux

Development & Design Technologies:
HTML, XHTML, CSS, JavaScript, Jscript EcmaScript, DHTML
XML, XSL, XForms, WML
PHP
MySQL, MSDE, MSSQL Server

Software:

Development Environments:
Macromedia
Dream weaver 3, 4, MX
Flash 4, MX
Fireworks 4, MX
Ultradev 4
Microsoft
Front-page 2000 - 2003
Visual J++ 6.0
Visual Basic 6.0
HTML-Kit
Zend Studio
Zend for Eclipse

Graphics:

Database Management:
MySQL, PostgreSQL
MS Access
MSDE / MSSQL Server

Web Servers:
Apache, Apache Tomcat, IIS 5.0 – 6.0

Other:
Microsoft
Office professional 97, 2000, 2002, 2003

- Data import & migration
  - Initially imported data from Gorkanas inhouse .NET/ SQL Server.
  - With the merger of Durrants I have been the sole person responsible for executing a large number of ETL processes both within Oracle 10g/11g and a cluster of SQL Server for processing OLAP cubes. Additionally wrote bidirectional updates between MySQL & Oracle 10g server from both PHP, Java, .NET using 0mq as a message bus and CouchDB as a consistent storage.
  - Migration of servers to Durrants infrastructure on dual hp blade G7 datacenters with 160GB ram. Demonstrated performance issues and sped up Durrants infrastructure by 900% during testing on NetAPP and resulted in switching to local disk packs for performance. Automated installation with vagrant & slack.
- Subset of key functionality
  - Email - Gorkana & their clients using the system, send around 100k emails per day, delivery of emails is a critical aspect of their business along side timed deliveries to media outlets and journalists. We have written an extensive emailing system to ensure delivery with monitoring.
  - Search - Originally wrote using MySQL, however have rewritten to use 0mq and Elastic Search, this was a fundamental and critical rewrite of the core of Gorkana. Search affects every aspect of the system including generating lists of recipients to mail. The criteria to search on is fairly extensive and has a large number of complex intersections & hierarchical data to search upon. This was carried out solely by myself and a senior colleague.
  - Sales - Migrated a MS Access accounting system to PHP/MySQL, which handles invoicing, renewals, product details.

- *Vivomiles*
  - Vivo Miles is a school reward system used in 80 local authorities to improve motivation, raise attendance and grades. This is a product of Everlution, which has a user base of 500k students, 80k staff and 400k parents.
  - Whilst not a permanent fixture of this team I acted in a consultant capacity and temporary lead of this team. Typically brought in to speed development of features or to resolve performance problems. I also wrote the underlying framework, which uses components of Zend Framework within an MVC architecture.
    - Infrastructure
      - Lang *(php, bash)*, web & lb *(apache, haproxy, keepalived)*, cache *(memcached, apc, mysql - materialized views)*, message queues (beanstalk), storage & database *(mysql)*, email *(exim)*, monitoring *(munin, mon, bash),* frameworks *(Zend Framework)*
    - Subset of functionality worked on
      - Rewrote session handling to be based on Redis rather than MySQL to isolate bottlenecks from MySQL to stop sleeping connections and contention issues.

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        - Rewrote web services implementation within a couple weeks and created a sandbox environment (http://developers.vivomiles.com/). Documentation is introspected and taken from annotations within docblocks. Although the web services implementation is not truly restful it very flexible and supports responses in binary, json, xml, php serialized, html and csv formats.
        - Wrote financial forecasting for Vivomiles.
        - CSV uploads and imports
    - *Bullbearings*
        - Financial trading games created for Reuters, RBS, Bullbearings, Société Générale and others. In a similar capacity to Vivo, I continue to support the couple active developers on Bullbearings, aiding them on relatively complex applications. Such as importing realtime feeds from java into the applications, importing real-time data via C++ applications I have written in the past.

Bullbearings subsidary of Everlution: London / Australia November 2006 – Current
Lead Developer

- Developed new virtual trading platforms for Shares, Spread Betting, CFDs, and FX based on real-time and delayed stock exchange feeds with order matching and execution. Architected a custom framework using MVC for all current/future projects in PHP.
- Developed real-time and delayed data feeds via interactive-data API, distributing data to multiple websites from numerous stock exchanges, as well as writing monitoring tools for multi-threaded queues and latency. (C++)
- Charting with intraday and end of day data.
- Developed a web-services platform to our trading systems with the Zend Framework. That implemented a dynamic test bed, which introspected classes, methods, properties and extracted docblocks for a web interface to execute exposed methods. (Soap, Rest, XmlRpc, Jquery).
- Executed internal/external performance and security tests as well as ensuring resiliency in clients' sites.
- Managed 10-15 Linux servers with monitoring, deploying to distributed environments and setup/support of clients servers when remotely hosted.
- Currently migrating most of our hosting to Amazon EC2, with automated scaling, replication and redundancy.
- Lead a team of 6 developers conducting code reviews and audits.
- Setup Continuous Integration with Selenium RC, load testing with JMeter via a proxy using phpUnderControl with cruisecontrol.
- PHP 4/5, C++, VPNs, JQuery, mootools, mocha UI, Selenium RC, phpunit, phpUnderControl / CruiseControl, apache, MySQL, various Linux distros.

World Archipelago Internet: London, UK November 2005 – November 2006
Senior Developer

- Developing varied web/client applications for The History Channel, Discovery Channel, Property Clients etc. (.NET(C#, ASP.NET), PHP4/5, XML, Web Standards, XHTML, CSS, MySQL 3/4, and many more.) Solutions include microsite generators, maintenance, portals etc…

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Planetnewmedia: London, UK October 2004 – November 2005
Developer

- Developing varied web/client applications for MTV, Hasbro, Museum of London, etc. (.NET(C#, ASP.NET), PHP4/5, XML, RDF, Web Standards, XHTML, CSS, MSCMS, Commerce Server 2002, SAP integration and many more.) Solutions include, portals, ecommerce…

Education

- Highams Park G.M School, England 1994-1999
- Epping Forest College, England 2000-2001
- Overseas Family College (California State University), Singapore 2001-2002

Exam	Course	Grade
CSU	English Composition	C+
CSU	Micro-Economics	C
CSU	Macro-Economics	C
CSU	Critical Reasoning	D+
CSU	Algebra, Trigonometry, and Calculus	D
CSU	Patterns in Nature (Physics)	D
A-Level	Computer System, Programming, and Network Concepts	Pass 1st Year
GNVQ	Advanced Business	Pass 1st Year
GNVQ	Intermediate Business	Merit
GED	State High School Equivalency Diploma	Pass
GCSE	Geography	C
GCSE	English Literature	C
GCSE	Mathematics	C
GCSE	English Language	D
GCSE	Speaking & Listening	D
GCSE	Business Studies	D