# Ashley Hindmarsh - Curriculum Vitae - August 2018

# Experienced contract Java and Perl developer.

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* British Citizen
* Locations considered: London / Sussex / remote
* Security Clearance: Disclosure Scotland
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* Current CV: <http://www.bellesoft.uk/ash-cv/ashley.hindmarsh.cv.pdf>
* References available upon request

## Summary

* Software development experience in small/medium/large commercial organisations, across multiple sectors.
* Previously Tech lead on key customer-facing systems for the BBC - the power behind iPlayer.
* Previously Principal Dev and Team lead on the award-winning BBC Video Factory portfolio - bringing over a million hours of content to all devices.
* Recent, relevant experience in Agile and DevOps environments, continuous integration/delivery (CI/CD) to Cloud platforms.

## Technical

### Development

* General: Object-oriented, with a functional mindset. Focus on using TDD/BDD to drive clean, maintainable code.
* Java (5+ years): Oracle Certified Associate, Java SE 8 Programmer. Spring, Apache Camel, Java8, Reactive/RxJava, JMS, TDD/BDD (JUnit, Mockito, Cucumber-JVM), Servlets, REST (JAX-RS/Jersey), Maven, JAXB, Jackson, Protobuf, Guava, Commons, Spring Boot, DropWizard.
* Perl (10+ years): "Modern Perl" OO (Moose/Moo, Plack) - database apps, web services, data-processing (XML, JSON etc).
* Ruby (2 years for BDD only): Cucumber, XML, rvm/rbenv, gem development, bundler.
* Javascript (occasional): Exposure to node.js, JQuery.
* BDD: Ruby/Java, Cucumber, some Jasmine/Selenium.
* Frontend (limited): HTML, CSS, Javascript (JQuery), Bootstrap.
* Also commercial experience with: Python, C/C++, GNU toolset (bash etc), OpenSSL, XML toolchain (XSLT, XQuery, etc), virtualization.

### Data and data processing

* Relational databases (mainly mySQL, exposure to Postgres); applications, schema design, query design and optimisation
* "NoSQL" databases and key/value stores (e.g. DynamoDB, Cassandra, Redis, Memcached)
* Data and metadata representation: Storage and messaging (include schema design) using XML, JSON, Protobuf.
* XML data manipulation: XSLT and XQuery.

### Delivery

* Web-scale architecture: availability, maintainability, API design, caching, volumetrics, microservices
* Platforms: Linux (mostly RHEL/CentOS, Ubuntu)
* Agile: Scrum, Kanban, continuous integration/delivery, TDD, BDD
* Search Engine Optimisation (SEO) - mainly for Google (Analytics), focus on engineering practice to support SEO requirements.
* Cloud: AWS architecture and implementation: EC2 (with ELB/ASG), SQS, SNS, S3, IAM, Cloud Formation, Cloudwatch.
* Security: PKI; SAML authentication; hashing, encryption/decryption, signing/verification with XML standards (xmldsig/xmlenc).
* Support software/systems: Jenkins, Maven, Puppet/Ansible, Subversion, Git, Jira, Confluence, Splunk

## Experience

### Aug 2015-present: Contracting services t/a "Belle Software"

**Java Software Engineer** on-site at Mendeley/Elsevier (London / Jan 2017-July 2018)

* Part of multiple cross-functional teams for Mendeley, through a major technology refresh.
* Acquisition and Onboarding: Migrating local Oauth2 sign-in to federated OpenID Connect solution. High-volume, mission-critical services.
* Building new services for flagship 'Reference Manager 2' product - mix of client-facing and message-processing.
* Working mostly with back-end Java 8 development, in a microservice architecture with continuous deployment.
* Technologies used/learned: Java 8, Dropwizard, Kibana, Redis, TDD, BDD, Oauth2, OpenID Connect (OIDC), RxJava, Docker/ECS, Terraform, AWS, Payments integration (Adyen).

**Perl Software Engineer (SEO)** on-site at Zoopla (Southwark / Nov 2015-Dec 2016)

* Tasked with re-engineering of SEO support to support long-term transformation from a monolithic site to SOA; includes setting-up a permanent SEO engineering team.
* Developing internal SEO engineering platform and reporting framework, for a major website which relies hugely on organic SEO traffic.
* Perl, Python, Google APIs, Google Analytics, AWS Redshift, Birst BI tools. Some HTML/CSS/Javascript.

**Java Software Engineer** on-site at Sky (Osterley / Aug-Oct 2015)

* Working within small Agile teams, developing high-volume Web services to support both OTT client-facing and back-end APIs.
* Tech: Java, Cassandra, Jersey, AWS+Ansible, Docker, Jenkins, AppDynamics, Graphite+Grafana.
* Working environment: Agile with Scrum/Kanban, pair programming with TDD/BDD (Java/Ruby).

### 2014-(Aug)2015: BBC Digital - Media Services

**Team Lead / Principal Software Engineer**

* Led a new team, charged with reduction of both AWS costs and technical debt. Responsible for a mix of greenfield and legacy components.
* Design and build of components for the BBC's [Video Factory](http://www.bbc.co.uk/blogs/internet/entries/61d2795d-ad53-3547-a06a-a038cf1ef325). Video Factory ensures that BBC digital audio and video is available to users across a vast range of devices. Components are designed to be highly-available and scalable.
* Java (Camel/Jersey/Spring Boot) applications, continuous integration (Jenkins), AWS in a devops environment. Extensive use of AWS (EC2/ELB/ASG,CloudFormation,S3,SQS,SNS - limited exposure to DynamoDB and Lambdas).
* Attended AWS Architecture courses. Contributed/presented at BBC internal cloud forum.
* Working environment: Agile with Kanban("Scrumban"), TDD/BDD (Java/Ruby). Pair programming (where appropriate).

### 2012-2014: BBC Future Media - Publishing Services

**Principal Software Engineer**

* Development and maintenance of Java components for Video Factory (details above), and existing Perl components.
* Ongoing tech lead responsibility for selected iPlayer's core services - then supporting 18 million+ req/day.
* Designed and delivered a secure SAML gateway supporting the "BBC Store" and the "Xbox iPlayer" products.
* Organised coding "dojos" for TDD.

### 2008-2012: BBC Future Media - Online Technology Group

**Technical Lead / Principal Software Engineer (contract)**

* Design and delivery of "Media Selector 5" application in Perl; a business-critical, audience-facing service behind all iPlayer playback. Tech: Perl (Moose,Plack), XML/JSON, NoSQL (couchdb).
* Ongoing maintenance on existing related middleware and customer-facing services for BBC media delivery. Included major database migration (2012-2014); focus on data integrity, risk management and migration planning.
* Led the delivery of the playback mechanism for iPlayer 3G/iOS product (Dec 2011).

### 2007-2008 CAIW Netwerken (contract)

* Maintaining Perl middleware services; reverse-engineered SOAP/WSDL contract from Perl source code for Java clients.

### 2005-2007 Semantico Ltd

* Developing new client sites (e.g. www.blackwellreference.com) in Perl using Semantico's backend CMS and access management technology.
* Some Java work (Eclipse/Tomcat/Hibernate/PostgreSQL)

### 1999-2005 Best Scarper Ltd

* Providing freelance software engineering services. Multiple clients.