# Ashley Hindmarsh - Curriculum Vitae - August 2020

# Java Consulting Engineer (Freelance)

* Mobile 07931 532261
* Email ash-jobs@best-scarper.co.uk
* British Citizen
* <https://uk.linkedin.com/in/ashleyhindmarsh>
* 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.
* Happiest as part of an agile team, focussed on customer needs and delivering business value.
* 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.
* Ethos: *Each line of code has an ongoing cost, so write as little as possible, and keep everything else tidy. Tests are first-class code.*

## Technical

### Development

* General: Object-oriented, with a functional mindset. Focus on using TDD/BDD to drive clean, maintainable code.
* Use of containerization (Docker) to reduce distance between development and production.
* Java (7+ years): Oracle Certified Associate (Java 8). Spring Boot/Core/Data/Cloud/Batch/Security, Java8+, Reactive, Apache Camel, TDD/BDD (JUnit, Mockito, Cucumber-JVM), REST (JAX-RS/Jersey/Spring), Maven/Gradle, JAXB, JSON, DropWizard.
* Perl (10+ years): "Modern Perl" OO (Moose/Moo, Plack) - database apps, web services, data-processing (XML, JSON etc).
* Javascript (occasional): Exposure to node.js, JQuery.
* Other dynamic languages: Javascript, Ruby, Python
* Frontend (basic): HTML, CSS, Javascript (JQuery), Bootstrap.
* Relational databases: applications, schema design, query design and optimisation
* "NoSQL" databases and key/value stores (e.g. DynamoDB, Redis, Memcached)

### Delivery

* Web-scale architecture: availability, maintainability, API design, caching, volumetrics, microservices, performance testing.
* Distributed systems: Design and maintenance for monoliths, microservices and message-oriented systems. They all have their place.
* Cloud (IaaS/PaaS):
  + AWS architecture and implementation: EC2 (with ELB/ASG), SQS, SNS, S3, IAM, Cloud Formation.
  + Recent Azure experience, using Azure Devops pipelines, deploying into AKS clusters, App Gateway, KeyVault.
* Security: PKI; SSO (OpenID Connect) hashing, encryption/decryption, signing/verification with XML standards (xmldsig/xmlenc), some expose to SAML.
* Support software/systems: Jenkins, Maven, Gradle, Puppet/Ansible, Subversion, Git, Jira, Confluence, Splunk

## Experience

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

**Java Developer** on-site at Tesco Bank (London / Oct 2018-present)

* Part of a team, engaged in multiple projects, as *de facto* technical lead.
  + Rebuilding the legacy Tesco PayPlus backend monolith in a microservice architecture. Multiple techologies involved end-to-end, including integration of third-party fraud prevention and detection (Cryptomathic, InAuth, Accertify), OAuth, payments (3DS1/2).
  + Migrating services from AWS to Azure, while maintaining the integrity of the overall system. New services are running on a Kubernetes enviroment in Azure (AKS), using Azure Devops pipelines.
  + Introduction of a new backend payment system, including migration of the entire customer base, designing and implementing a pipeline to migrate over 1 million legacy payment devices.
* Working with solution engineers and product managers, I translated technical specs into work units (Jira), feeding back into Agile stories, working closely with a solutions architect to ensure we are meeting the spec. Development included all functional tests, and infrastructure.
* New Tech stack: Java 8 & 11, Spring Boot/Security/OAuth/Data/Cloud, Hibernate, MySQL, Kotlin, Groovy (Gradle/Spock), Wiremock, Kubernetes, Jenkins. CI/CD via Azure piplines.
* Legacy stack: Java 7, Spring, Tomcat, Jersey, Oracle, Cucumber, Spring Batch.
* Gained experience with Azure infrastructure, building pipelines for new services, deploying to an AKS Cluster, and integrating with App Gateway, KeyVault.
* Scheduled, planned and hosted meetings for Java development team to discuss technical matters, best practice, refinement etc.

**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.

### August 2008 - July 2015: BBC Digital/Future Media

*2014-2015 : Team Lead / Principal Software Engineer - Media Services*

* 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) 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).
* Working environment: Agile with Kanban("Scrumban"), TDD/BDD (Java/Ruby). Pair programming (where appropriate).

*2012-2014 : Principal Software Engineer - Publishing Services*

* 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 : Technical Lead / Principal Software Engineer*

* 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.

### 1999-2005 Best Scarper Ltd

* Providing freelance software engineering services. Multiple clients.