

# **Candidate Brief**

**Senior Software Engineer** 

**April 2017** 



# **CABI BACKGROUND**

CABI is an international not-for-profit organization that improves people's lives by providing information and applying scientific expertise to solve problems in agriculture and the environment. CABI is an intergovernmental organization that can trace its origins back to 1910. Our 48 member countries guide and influence our core areas of work, which include International Development and Publishing.

We have over 500 staff based in 16 countries. We have offices in Brazil, China, Ghana, India, Kenya, Malaysia, Pakistan, Switzerland, Trinidad & Tobago, the UK, the USA and Zambia.

#### **CABI's Knowledge Business**

CABI produces key scientific publications, including <u>CAB Abstracts</u> – the world-leading abstracting and indexing database covering applied life sciences. We also publish multimedia <u>compendia</u>, <u>books</u>, <u>eBooks</u> and <u>full text electronic resources</u> aiming to further science and its application to real life. CABI invests its publishing surpluses directly into development projects, helping to improve livelihoods worldwide.

## International Development projects and research

Through knowledge sharing and science, CABI helps address issues of global concern such as improving global food security and safeguarding the environment. We do this by helping farmers grow more and lose less of what they produce, combating threats to agriculture and the environment from pests and diseases, protecting biodiversity from invasive species, and improving access to agricultural and environmental scientific knowledge.

For more information go to www.cabi.org and www.plantwise.org



#### THE ROLE

Job title: Senior Software Engineer

Salary range: £35k to £45k

Grade: 6

**Reporting to:** Software Engineering Manager

**Key peer group:** DevOps Teams, Technical Integrations Team

**Location:** Head Office, Wallingford, UK - In order to process any applications from nationals

outside of the EU and UK, we would require documentation to show the applicant is currently resident and able to work in the in the UK, or is able to relocate on own means and possesses full authorisation from the UK Border Agency (for further information please use

the following link <a href="http://www.ukba.homeoffice.gov.uk/">http://www.ukba.homeoffice.gov.uk/</a>)

#### Purpose of the role:

CABI is an international not-for-profit organization that improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. This role plays a critical part in developing and enhancing web applications, sites and databases that support this mission. Working with other software engineers and database engineers this role helps to set excellent development practices and to deliver innovative changes in new and existing products. It is a hands-on technical role that leads by example using web, mobile and database technologies.

## Key accountabilities:

- Designing, developing and maintaining CABI websites and applications mainly using ASP.NET, C# & MVC
- Strong middle-tier development experience with good front end web site development skills
- Developing and enhancing SQL Server databases
- Knowledge or willingness to learn MarkLogic and XQuery
- Designing and implementing appropriate solutions architectures
- Designing, developing and maintaining mobile apps
- Working with the release team to design & implement improved release processes
- Reviewing the work of other team members and providing assistance as required
- Researching and keeping up-to-date with technology applicable to CABI's business needs
- Writing clear, concise and comprehensive technical documentation
- Ensuring development and launch procedures and policies are adhered to
- Helping to ensure the global DevOps team works as one efficient team



# **Person Specification**

You will have a passion for software and technical innovation, and enjoy being involved in the complete software delivery lifecycle from project scoping through to implementation, testing and ongoing maintenance. You are able to design and implement solutions using a variety of technologies, frameworks and platforms to deliver excellent results. An interest in learning and implementing new technologies is a must, along with the ability to help other engineers to adopt the technology and improve.

You will have a very strong background in delivering ASP.NET and SQL solutions in a team environment ideally with some exposure to MarkLogic, document databases or working with XQuery. You will have experience of creating and improving the solution architecture of multiple products.

#### **Qualifications and skills**

	REQUIRED	DESIRABLE
	(commercial or project based)	DEGITABLE
Technical knowledge & skills	<ul> <li>5+ years ASP.NET using C# including some MVC</li> <li>5+ years relational database development, preferably SQL Server</li> <li>5+ years using source control within a team setting</li> <li>3+ years working with front end web technologies such as JavaScript libraries, HTML5, CSS2/3 &amp; responsive design</li> <li>3+ years enterprise level, multi-tiered solution architecture</li> </ul>	<ul> <li>API design and implementation, ideally using Web API</li> <li>Document database development, preferably MarkLogic, or XQuery</li> <li>Document database modelling</li> <li>SPARQL</li> <li>XML/XSLT</li> <li>Mobile application development</li> <li>Experience of working in a DevOps or Agile culture</li> </ul>
Education & qualifications	<ul> <li>Degree or MCP's or equivalent in Computer related subjects or relevant work experience</li> </ul>	
Personality characteristics	<ul> <li>A pragmatist with excellent judgement to balance business and technical needs</li> <li>Holds a modern view on how software should be deployed</li> <li>Ability to quickly learn, implement and evangelise new technologies</li> <li>Able to mentor and motivate other technical staff</li> <li>Passionate about the IT industry &amp; CABI's mission</li> <li>Good communicator with excellent English</li> <li>Can-do attitude</li> </ul>	Interest in scientific disciplines and/or international development
Special Circumstances	On rare occasions, this role will be required to work outside of normal working hours.  Some travel to other CABI offices may be required.	

#### NOTE

This job description is not intended to be exhaustive. It is expected that the post holder and CABI will adopt a flexible attitude and accept that the duties may have to be varied according to circumstances, in particular changing corporate requirements and individual development needs.



# **EQUAL OPPORTUNITIES**

CABI is an equal opportunities employer and welcomes applications from candidates irrespective of age, gender, race, colour, nationality, ethnic or national origin, disability, religion, sexual orientation or marital status. No applicant will be disadvantaged by conditions which cannot be shown to be justified and selection will be based on merit.

# **HOW TO APPLY**

To apply please send a covering letter detailing how you meet the candidate profile and a full CV quoting Job Reference 06/2017 to <a href="mailto:recruitment@cabi.org">recruitment@cabi.org</a> Please state where you saw this advertisement.