



## Role Profile: iOS Developer

### Vacancy Description

Amiosec is an exciting and growing UK technology company with innovation, agility and state of the art technology at its core. We work in partnerships with UK government customers and commercial providers to deliver research, technology and products in the communications security sector.

We are looking for a skilled mobile developer with experience in building business focused applications for iOS-based devices and integrating our trusted modular communications architecture into a number of new mobile applications, meeting a significant operational need for our customers.

Your primary focus will be development of iOS applications and their integration with back-end services. There are UI/UX aspects to this role but also a large emphasis on secure application infrastructure. You will be working alongside other engineers and developers working on different layers of the solution.

Due to the nature of our work, all candidates will be required to obtain and maintain an appropriate UK security clearance.

### Typical Activities

Subject Area	Activities
<b>Application Design &amp; Development</b>	<ul style="list-style-type: none"> <li>Design and build applications for the iOS platform including both UI and application infrastructure.</li> </ul>
<b>Middleware Development</b>	<ul style="list-style-type: none"> <li>Selection and integration of both 3<sup>rd</sup> party and in-house existing technologies into the iOS eco-system.</li> </ul>
<b>Technology Research</b>	<ul style="list-style-type: none"> <li>Evaluating latest technologies (e.g. iOS enhancements, languages).</li> </ul>
<b>Tool Evaluation</b>	<ul style="list-style-type: none"> <li>Investigation of emerging and existing frameworks (e.g. test, automation), libraries, build tools etc.</li> </ul>
<b>Planning and Estimation</b>	<ul style="list-style-type: none"> <li>Task breakdown, sizing, progress reporting.</li> <li>Development/contribution to technical proposals.</li> </ul>
<b>Team Activities</b>	<ul style="list-style-type: none"> <li>Involvement in Agile Scrum ceremonies, planning and design sessions.</li> </ul>



## AMIOSEC PROPRIETARY

The sections below outline typical responsibilities and competencies that we are looking for. These are wide ranging and represent the full cross section of capabilities that we seek. Prospective candidates should be able to demonstrate ability in a number of the technical competencies (depending on grade/experience) and as a minimum, satisfy the core competencies as listed.

### Technical Competencies

Subject Area	Competency
<b>Programming Languages (Primary)</b>	<ul style="list-style-type: none"><li>• Proficient with Swift and Cocoa Touch.</li><li>• Knowledge of native Xamarin and C# development on iOS.</li></ul>
<b>Programming Languages (Secondary)</b>	<ul style="list-style-type: none"><li>• Experience of Objective C.</li><li>• Integration of C &amp; C++ libraries into iOS.</li><li>• Experience of 3<sup>rd</sup> party frameworks such as ReactiveUI and Realm.</li><li>• Experience with offline storage, secure enclave, threading, and performance tuning.</li></ul>
<b>Scripting Languages</b>	<ul style="list-style-type: none"><li>• Python, Bash, etc.</li></ul>
<b>Software Quality &amp; Testing</b>	<ul style="list-style-type: none"><li>• Unit and system testing frameworks.</li><li>• Knowledge of UI/UX standards.</li><li>• Understanding of current Apple's design principles and interface guidelines.</li><li>• Usage of Instruments, Reveal etc.</li></ul>
<b>Architectures &amp; Build Systems</b>	<ul style="list-style-type: none"><li>• Build systems (xcode, msbuild, GNU make etc).</li><li>• Familiarity with iOS continuous integration.</li><li>• Knowledge of Apple Configurator &amp; MDM based application deployment.</li></ul>
<b>Development Targets</b>	<ul style="list-style-type: none"><li>• iOS</li><li>• Desktop operating systems – OS X (primary), Linux (secondary).</li></ul>
<b>Networks and Protocols</b>	<ul style="list-style-type: none"><li>• Familiarity with web APIs (REST, SOAP) to connect iOS applications to back-end services. Familiarity with Microsoft EWS a bonus.</li><li>• Network communications protocols (TCP/IP, IPSec, HTTP etc).</li><li>• Network analysis and debugging tools (e.g. WireShark, Charles).</li><li>• Usage of APNs.</li></ul>
<b>Communications Security</b>	<ul style="list-style-type: none"><li>• Understanding of cryptography and cryptographic algorithms.</li><li>• Understanding of web authentication and encryption mechanisms.</li><li>• Secure application design and defensive programming.</li></ul>
<b>Development Tools</b>	<ul style="list-style-type: none"><li>• Requirements management.</li><li>• Design capture (UML, etc).</li><li>• Source control (including workflows - Git).</li></ul>



**Core Competencies**

Subject Area	Competency
<b>Approach</b>	<ul style="list-style-type: none"> <li>• Enthusiasm for technology and desire to understand it, work with it and develop innovative solutions.</li> </ul>
<b>Working Style</b>	<ul style="list-style-type: none"> <li>• Ability to work individually or as a member of a multi-discipline team.</li> <li>• Self-motivated.</li> <li>• Ability to capture and articulate requirements and design ideas.</li> <li>• Willingness to be flexible and embrace new technologies/techniques.</li> <li>• Good time management skills, ownership of own deliverables.</li> <li>• Tenacious problem solving skills. Identify and correct bottlenecks and fix bugs.</li> </ul>
<b>Customer Focus</b>	<ul style="list-style-type: none"> <li>• Excellent communication skills (including generation of written content).</li> <li>• Ability to investigate and understand customer needs.</li> </ul>
<b>Innovation</b>	<ul style="list-style-type: none"> <li>• Ability to foster and develop innovative ideas.</li> <li>• Lead/contribute to improvements in products and ways of working.</li> </ul>

