

## Role Profile: Senior / Principal Systems Engineer (Cyber Security)

### A bit about us...

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, products and services in the communications security sector.

Our Engineering team is expanding, and we are looking for an experienced systems engineer to come on board and join us on our journey. We provide a stimulating working environment, with an opportunity to be involved in various projects from early-stage proof-of-concepts using emerging technologies, tools and languages right through to full lifecycle product development. We run self-managing agile teams using a mixture of Scrum and Kanban techniques so that engineers get a great sense of ownership of their work and can directly see how their efforts contribute to the bigger picture and help our customers achieve their goals.

We actively encourage personal development and have a structured career framework based on industry standard SFIA grades, with core and technical competencies aligned to each grade. We provide training tailored to your needs and learning methods and encourage our engineers to develop their skills – both technical and non-technical alike.

Collaboration and team spirit are key – we actively seek to share knowledge and ideas and preserve a family feel within our organisation. Our monthly Engineering Forum provides an ideal vehicle for sharing tips, tricks and techniques between projects/teams and we organise regular social activities to bring people together – something we feel has been especially important during this last year of lockdowns and remote working.

We are passionate and committed to growing new talent and as such run a Graduate Scheme and have an active STEM outreach program – working with schools, universities, and the NCSC CyberFirst program. If you're interested, we'd love you to get involved and help out in these areas.

Our Engineering team is key to our success as a business and this not only includes what we do, but *how* we do it. Like any engineering organisation we have standardised processes and ways of working, but these are owned by the Engineering team and we work to ensure that they are relevant, helpful and as efficient as possible so that we can focus on what we're good at – the engineering. We actively encourage our engineers to contribute to improvements in our working practices and environment and regularly try out new ideas with a view to rolling things out that work well for us.



## Senior / Principal Systems Engineer (Cyber Security) Vacancy

As a Senior or Principal Systems Engineer, you'll need at least a few years of experience so that you can hit the ground running. You'll also need to be familiar with the development of encryption or cyber security capabilities, with a good understanding of NCSC High Assurance evaluation processes and associated standards. Responsibilities include conception, design, specification and development of innovative and complex encryption and cyber security solutions that help to solve the difficult problems our customers present to us. You should be comfortable working as part of a multi-disciplined engineering team, a background in hands-on engineering (software, FPGA or hardware) would also be advantageous.

The sections below outline the competencies that we are looking for.

Due to the nature of our work, you'll need to obtain and maintain an appropriate UK security clearance.

### Technical Competencies

Subject Area	Competency
<b>Security Architecture Design</b>	<ul style="list-style-type: none"> <li>• Cryptographic / Cyber Security system design, including an ability to design and develop appropriate security architectures.</li> <li>• Knowledge of applied cryptography including a good understanding of the uses and properties of cryptographic functions.</li> <li>• Allocation of Security Enforcing Functions across COTS and bespoke technology components based on analysis of threats, vulnerabilities and potential attack vectors of individual technologies and the wider system context.</li> <li>• Analysis of High Assurance architectural components including implementation constraints, hardware vs software trade-offs, etc.</li> <li>• Ability to collaborate effectively with external stakeholders to refine system architectures which meet UK High Assurance standards.</li> </ul>
<b>Technical Leadership</b>	<ul style="list-style-type: none"> <li>• Capacity to provide technical oversight and management of projects, providing direction and guidance to engineering teams to deliver required outcomes.</li> </ul>
<b>Technology Innovation</b>	<ul style="list-style-type: none"> <li>• Able to identify and evaluate emerging technologies, tools, etc. that may benefit future High Assurance capabilities.</li> </ul>
<b>Networks and Protocols</b>	<ul style="list-style-type: none"> <li>• Excellent knowledge of network communications security protocols, especially IPSec, IKEv2, ESP and PRIME</li> </ul>
<b>Communications Security</b>	<ul style="list-style-type: none"> <li>• Understanding of applicable cryptographic and key management specifications.</li> </ul>
<b>Documentation</b>	<ul style="list-style-type: none"> <li>• Authoring of technical documentation, including research reports, technical proposals to support bids and detailed design documents to support High Grade evaluations</li> </ul>



## AMIOSEC PROPRIETARY

Subject Area	Competency
	<ul style="list-style-type: none"> <li>Ability to tailor document style and content appropriately for consumption by a wide range of stakeholders (customers, evaluators, engineers, management, etc.)</li> </ul>
<b>Development Tools/Lifecycle</b>	<ul style="list-style-type: none"> <li>Requirements management - you should have an understanding of how to read, interpret and specify requirements.</li> <li>Design capture.</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 design ideas.</li> <li>Willingness to be flexible and embrace new technologies/techniques.</li> <li>Good time management skills.</li> <li>Ownership of own deliverables.</li> <li>Tenacious problem-solving skills.</li> <li>An ability to inspire and be inspired.</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>Willingness to lead and/or contribute to improvements in products and ways of working.</li> </ul>

