Senior Security Engineer- Embedded Systems

Are you looking for the opportunity to make a direct impact on next generation products with an industry leader? Do you have experience leading the design, development and enhancement of new and existing system technologies? Are you at ease working, collaborating and innovating in small, agile teams? Does your experience include working with embedded products that encompass hardware, system software, and application software components? Do you bring a can-do attitude and strong desire to win with you to work every day? Have you ever considered building secure communications to your own robot army? If so, Data I/O could be the place for you!

Headquartered in Redmond, Washington, but a global company with subsidiary offices in Munich, Germany and Shanghai, China, Data I/O is the world's leading provider of device programming systems and solutions for semiconductor devices.

We are currently seeking a full-time senior security engineer to engage in all phases of work on our latest product, SentriX. If you have experience in design and implementation of security in embedded systems, this is the exciting opportunity you have been looking for!

Minimum Requirements:

- Strong understanding of embedded systems / software
- Experience with boot loaders, embedded applications, C++/C#, embedded Linux
- Experience with security evaluation and threat assessments of embedded systems
- Experience with design and implementation of secure embedded systems
- Understanding of common cryptographic algorithms (e.g. AES, 3DES, RSA, ECC, etc.) and protocols (e.g. TLS, Diffie-Hellman key exchange, etc.)
- Embedded and/or hardware security knowledge (e.g. familiarity with HSM, TPM, identity, authentication, secure boot, ARM TrustZone, etc.)
- Understanding of common weaknesses and modern attacks on cryptographic algorithms and protocols
- Familiarity with compiler internals, debuggers, disassemblers, and other low-level development and analysis tools
- Demonstrated technical leadership among teams comprised of both hardware and software engineers
- Experience presenting work to and/or working with senior leadership teams up to the executive level
- Comfortable developing software and firmware implementations of security concepts for production release
- Demonstrated ability to handle multiple designs simultaneously
- Familiar with and accustomed to Agile design and development methodologies
- Ability to meet aggressive reliability, performance, cost, serviceability, and delivery targets
- Highly self-motivated team player with excellent written and verbal communication skills.
- 10+ years of experience in designing and shipping embedded hardware and software products.
- At least five years of experience in embedded security.
- A Bachelor's degree in Computer Engineering or a relevant field

Preferred/Desirable Qualifications:

- MS or PhD in Computer Engineering with a focus on security
- Understanding of and/or experience with: Reverse engineering, Invasive/semi-invasive attacks, Fault injection, Hardware Trojans, Physically Uncloneable Functions (PUFs), Physical layer identification/device fingerprinting, Tamper resistance
- Expertise in standards like HSM, TPM, Global Platform & Trustzone for secure isolation & remote attestation, Common Criteria, FIPS

- Experience in the development of product/engineering specifications and requirements
- Experience working with geographically dispersed development teams

Join our team!
We offer:

- A rewarding and challenging work environment
- Opportunity to work with many of the most talented hardware and software engineers in the Puget Sound region
- PPO/HDHP Health Plan, Dental & Vision Plans with FSA/HSA options
- Life Insurance
- 401k plan with company match
- Employee Stock Purchase Program
- 4 weeks paid time off (PTO) each year
- Holiday pay and time off 12/25-1/1 each year, in addition to other standard holidays

Data I/O Corporation is an Equal Opportunity Employer