

## Senior Radar System Engineer

### About Blighter

With global reach across the defence and critical national infrastructure sectors, Blighter has unique and patented best in class surveillance radar technology. A product company, Blighter delivers unique radar-based products that are specifically designed for protecting irreplaceable assets in demanding environments.

Blighter is poised to conquer a now fast-growing surveillance market whilst scaling up the business and taking advantage of these opportunities. It's an exciting time to be part of the team which is based South of Cambridge that takes the company to its next level, creating genuine value via its unique technology and commitment to quality.

### The Opportunity

Technology is moving at an unprecedented speed, and there are new developments every day. As a senior radar system engineer, you have the knowledge and expertise to be at the forefront of these developments. We have the environment and resources to put you there. Our engineering department is currently hiring for a senior radar system engineer to help us develop our next generation AESA radar while also providing systems analysis of current fielded radar systems. The right candidate is as passionate as he or she is professional, and is invested in truly pioneering new technologies. We want enthusiastic, innovative and engaged engineers working with us.

### Key responsibilities

- Working closely with Blighter's Chief Radar Engineer to develop our new radar products
- Taking responsibility for aspects of the system design of the radar including specifying the hardware architecture, RF performance characteristics, waveform design and Digital Signal Processing (DSP) algorithms
- You will take ownership of the existing radar models and will develop and extend them to add new features and capabilities to the radar.
- Your tasks will also include radar trials analysis and preparation of antenna calibration data for the range of Blighter radars.

### Qualifications and knowledge

- Mathematics, engineering or physics degree
- Strong mathematical and analytical skills
- Industry experience of radar system design or satellite communication system design
- Understanding of the radar equation and its influence on radar architecture, waveform design and signal processing methods
- Knowledge of multi-function radar design and/or phased-array antenna design
- Knowledge of real-world radio effects (e.g. multipath, weather, clutter)
- Use of Matlab, Mathcad or similar

### Additional preferred/desirable requirements

- Familiarity with microwave waveguide structures and electromagnetic (EM) simulation
- Familiarity with RF Pro or Keysight SystemVue
- Experience of patent preparation
- Active involvement in the radar industry (seminars, generating papers etc)
- Subject to UK government Covid-19 advice, we anticipate that a mix of office (Great Chesterford) and home based working will be required. Occasional off-site or overseas visits may be necessary.

### Reporting to

- Engineering Director

We are an equal opportunity employer and will consider all qualified applicants for employment without discrimination on grounds of disability, gender or gender orientation, pregnancy or maternity leave status, race or national or ethnic origin, age, religion or belief, gender identity or re-assignment, marital or civil partnership status, protected veteran status (if applicable) or any other characteristic protected by law.

