



Principal Engineer Position Description

Principal Engineer position is a combination of innovation, project execution, and business development. An attractive candidate will have extensive practical experience gained from working as an engineer and will typically answer directly to the senior management of the company. The Principal Engineer will provide technical leadership in a wide range of activities developing the next generation of commercial and military wireless networking built upon innovative spectrum sharing methodologies. They will work in offices or labs, and some of their duties may require a reasonable amount of travel to work sites.

Responsibilities

- **Innovation** - Be a leader who thinks strategically with long-range goals in mind. Develop creative solutions to complex technical problems. Develop extensions to existing spectrum sharing solutions. Provide systems engineering expertise related to the development and implementation of new wireless communication system technology. Conduct engineering studies and investigations. Provide engineering guidance to other departments, and help to train new engineers. Keep abreast of industry trends and issues.
- **Leadership** - Lead all phases of technical projects. Responsible for providing guidance and oversight to multiple teams working on numerous products or developing various forms of technologies. Draft and execute contracts, track project progress and keep costs under control. Develop CONOPS, requirements, analysis, system architecture designs, algorithms, proof-of-concept simulations, benefit assessment and trade-off analysis, and systems engineering documentation. Oversee project conception, design and initial product specifications. Coordinate teams of experts in the accomplishment of complex tasks. Motivate staff and foster collaboration. Set goals and implement steps to meet them.
- **Support Business Development** - Support strategic planning, identify business opportunities, lead technical proposals to win new business with various agencies such as DARPA, ONR, AFRL, Army, Air Force and commercial companies. Demonstrate exceptional leadership and communication skills. Recognized as an engineering authority. Share expertise and insight with other engineers.

Relevant Experience

- Required - Research and development experience
- Required - 8+ years of experience in wireless systems engineering in all phases of system life cycle development. Strong wireless system (physical, multiple access, and networking) expertise. Experience with wireless waveforms, networks, propagation, antennas, etc. Real-time distributed algorithm design and implementation.
- Modeling and Simulation and/or Software Development using C/C++, MATLAB, and/or Python for application on DSP, GPP and/or FPGA processors.

- Requirements generation, system and software architecture development, testing definition and documentation
- Signal processing including demodulation, weak signal detection, and classification algorithms
- Artificial intelligence and machine learning software and application to wireless systems
- Experience leading small development teams
- Experience winning technical proposals

Education and Other Qualifications

- Required: US citizenship
- MSEE, PhD preferred
- DoD SECRET clearance

We Offer

- Competitive pay and benefits package
- Medical insurance
- 401(k) plan
- Paid vacation and holidays
- Free parking
- Easily accessible to DC and VA (walking distance to Spring Hill Metro station)

The ideal candidate would live in the Northern Virginia/Greater Washington DC area.

To Apply

Email resume and letter of interest to jobs@shedspectrum.com

Company Description

Shared Spectrum Company (SSC) is a pioneer in the development of innovative wireless advanced technologies that are revolutionizing the military and commercial use of spectrum. SSC has a unique technology culture focused on technical excellence, innovation and execution. This is a unique opportunity to gain invaluable experience in one of the most important technological advancements in wireless communications technologies today. SSC is located at 1593 Spring Hill Road, Suite 700, Vienna, Virginia 22182.

SSC is an Equal Opportunity Employer.