



FPGA Programmer Malvern, PA (On-site)

RAJANT CORPORATION is the global leader and pioneer of patented **Kinetic Mesh®** networking, powering mission-critical connectivity for autonomous systems, industrial operations, defense, mining, manufacturing, energy, logistics, and other demanding environments worldwide. For more than 25 years, Rajant has helped organizations connect people, machines, assets, and data through its **Mesh-Over-Everything™** architecture and distributed edge computing platform.

Together with its subsidiary, **Rajant Health Incorporated (RHI)**, Rajant is advancing Industrial AI, automation, mobility, and real-time operational intelligence—bringing resilient connectivity wherever people, machines, and data move.

POSITION OVERVIEW: Rajant is seeking an experienced **FPGA Programmer** to develop and support FPGA-based solutions for our industry-leading wireless mesh networking products. This hands-on role focuses on FPGA logic design, implementation, verification, debugging, and integration within embedded and System-on-Chip (SoC) platforms. You'll work closely with FPGA, software, systems, and hardware engineers to develop reliable, high-performance programmable logic for Rajant's embedded networking products.

KEY RESPONSIBILITIES:

- Design, develop, implement, and maintain FPGA logic using Verilog and SystemVerilog.
- Implement designs using industry-standard FPGA development tools and vendor tool flows.
- Develop RTL logic for embedded and System-on-Chip (SoC) architectures.
- Create and maintain Verilog/SystemVerilog test benches and verification test suites.
- Define and implement timing constraints; perform synthesis, simulation, implementation, verification, and Static Timing Analysis (STA).
- Develop and debug FPGA designs involving multiple clock domains and embedded interfaces.
- Support FPGA and product bring-up, testing, debugging, and troubleshooting.
- Participate in design reviews and contribute to technical and system documentation.

REQUIRED QUALIFICATIONS:

- Bachelor's or Master's degree in Electrical Engineering, Computer Engineering, Computer Systems, or related technical field.
- Approximately 5+ years of professional FPGA or digital logic design experience.
- Verilog/System design experience with 1G/2.5G/5G/10G Multirate PHY and MAC IP
- Experience with L2/L3/L4 Ethernet protocols
- Strong Verilog RTL coding and verification skills; experience with SystemVerilog and FPGA test bench development.
- Hands-on experience with Xilinx/AMD Vivado, Intel/Altera Quartus, or similar FPGA development tools.
- Strong knowledge of synthesis, Static Timing Analysis (STA), HDL simulation, timing constraints, and timing debug.
- Understanding of System-on-Chip (SoC) architectures, embedded processors, and multi-clock-domain design.
- Experience with hardware/software integration, FPGA debugging, and independent problem solving.
- Ability to work effectively within a small, multidisciplinary engineering team.

PREFERRED QUALIFICATIONS:

- Experience developing FPGA solutions for embedded networking, wireless communications, or security-related products.
- Familiarity with wireless waveforms such as 802.11, Bluetooth, LoRA, Wi-SUN
- Familiarity with ARM processor architectures and embedded SoC platforms.
- Familiarity with Ethernet, IPv4/IPv6, and embedded interfaces such as QSPI, MMC, I2C, or DDR.
- Experience with Mentor ModelSim or similar HDL simulation and verification tools.
- Programming or scripting experience with C, C++, Python, Tcl, Bash, or similar languages.
- Experience with FPGA/SoC product bring-up and products for defense, industrial, or other mission-critical applications.
- Current or previous U.S. Government security clearance is a plus.

WHY JOIN RAJANT?

- Be part of a cutting-edge tech company leading the charge in resilient, AI-driven, real-time connectivity solutions.
- Work with a team of visionaries, engineers, and storytellers dedicated to reshaping industries through adaptive networking.
- Gain global exposure, supporting diverse industries and collaborating with some of the world's most innovative companies.

RAJANT'S COMPANY PROFILE: www.rajant.com . Our patented InstaMesh Kinetic Mesh technology powers mission-critical operations around the world:

- Autonomous mining equipment across global sites.
- Robotics in factories and warehouses automating repetitive and dangerous tasks.
- Boston Dynamics' Spot® the Robot Dog and various aerial drones.
- Oil and Gas connectivity and Maritime Port automation worldwide.
- Mission-critical communication systems trusted by the U.S. Army to keep America and our Global partners safe.

WHO WE ARE: We're a tight-knit group of technology experts that demand excellence of ourselves and in all we do. We need like-minded professionals to identify problems and solve them, enabling our development teams to efficiently push ever more hardware and software solutions to market, faster and more reliably.

Do you have what it takes to be a part of the Rajant Team? Impress us with your resume today. If you make the team, this will be the most challenging , rewarding place you'll ever work.

Employment Type: Full-Time with Benefits. **Location:** Malvern, PA. On-Site. **Apply:** Introduce yourself with cover letter & resume to: jointheteam@rajant.com

Rajant Corporation is an Equal Opportunity Employer and does not discriminate on the basis of race, color, religion, gender, national origin, age, physical or mental impairment, sexual orientation or any other category protected under federal, state or local law. Rajant is a USG Contractor and complies with all US laws, regulations and Executive Orders.

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