



Skip is hiring talented wireless engineers to help build the next generation retail operating and consumer experience platform, powered by a proprietary and patent-pending RFID solution.

Our technology reads RFID tags 1000x faster and 20x more location precise than existing RFID solutions. As a result, we have created the ability to provide online-quality data, analytics and insights for the physical world thereby enabling retailers to optimize store operations and maximize consumer experiences across all channels. Specific benefits include:

1. Real-time unit and location accuracy for inventory
2. Improved in-store replenishment, stock checks and customer service
3. Low or no omni-channel fulfillment thresholds
4. Automated checkout* and returns

*Learn more about our checkout product at www.skip.it.

We have a very talented and experienced team that has collectively launched 19 satellites, manufactured thousands of RFID readers, and deployed to over 1000 stores. Retail only scratches the surface of what we intend to accomplish with this technology which has the ability to impact many different industries in vastly different ways.

Please find a list of available positions below:

Real-time, Embedded System Engineer

We are looking for an energetic engineer interested in developing real-time embedded systems working with a small team of diverse engineering disciplines. This position is primarily a software engineering role focused on both design and implementation, but also part of a small team to specify and build custom hardware. An ideal candidate will be a top-notch software engineer with experience or an academic background in wireless communication systems, networking, computer architecture, and hardware devices.

The initial product will be a networked cluster of embedded systems providing compute resources, wireless communication, video capture, and wired networking implemented on a custom hardware platform. This position will be initially focused on participating as part of a team in the requirements specification for the hardware platform and grow into a position primarily focused on the design and implementation of the software for a

real-time, embedded system. This will require close collaboration with systems engineering, hardware engineering, and software engineering.

Required:

- MS, Engineering degree preferred, BS Engineering degree acceptable
- 3-5 years of experience developing real-time, embedded systems
- Strong understanding of real-time operating systems
- Strong understanding of computer architecture
- Strong understanding of networking
- Strong understanding of wireless communication systems
- Experience integrating with hardware devices
- Strong understanding and experience with Modern C++ (and C)
- Confidence with at least one scripting language (Python preferred)

Wireless Communication Systems Engineer (4+ years wireless system design experience preferred):

This position will work directly with the CTO and an interdisciplinary team consisting of digital hardware, RF hardware, FPGA, and embedded software engineers to develop and deploy the next generation of RFID systems. The right person for this position must be able to develop wireless communication system simulations and guide translating them into hardware and software.

Required:

- Expertise in Wireless Systems including digital signal processing, communication algorithm development (Layer 1, Layer 2; PHY/MAC)
- Ability to develop link and system level simulations (Matlab, C/C++, Python)
- At least basic understanding of RF systems
- Ability to translate wireless and signal processing algorithms to working prototypes in collaboration with the implementation team
- Desire to work with intelligent, ambitious, and humble individuals in a fast-paced, invention-driven, start-up environment
- Eagerness to be a part of building a world-class engineering team with a positive, collaborative culture
- MSEE, PhD, or equivalent work experience

Preferred:

- Broad understanding of interference management techniques, MIMO beamforming, radio resource management, scheduling algorithms, channel access mechanisms, etc.
- Working knowledge of wireless propagation modeling and simulation

- Intermediate knowledge/experience in at least one of the technologies: 802.11, 3GPP, EPCGen2, Bluetooth
- Proven leadership ability

Wireless Communication Systems Research Engineer (4+ years of experience in wireless system design preferred):

This position will work directly with the CEO and CTO in developing and proving advanced algorithms to support the next generation (and subsequent generations) RFID and RF sensor systems. The right person for this job has a strong academic and theoretical background in wireless communication systems.

Required:

- Ability to develop and simulate advanced signal processing techniques (in Matlab and/or C/C++)
- Strong practical and theoretical understanding of Wireless System design including digital signal processing, communication algorithm development (Layer 1, Layer 2 ; PHY/MAC)
- Solid knowledge/experience in at least one of the technologies: 802.11, 3GPP, EPC GEN2, Bluetooth
- Strong understanding of RF propagation and multipath effects, and techniques to mitigate these effects
- Desire to work with intelligent, ambitious, and humble individuals in a fast-paced, invention-driven, start-up environment
- Eagerness to build a world-class engineering team and positive, collaborative culture
- MSEE required, PhD strongly preferred

Preferred:

- Working experience with propagation modeling tools
- Experience with advanced signal processing like adaptive equalization, turbo/LDPC codes, MIMO, etc.
- Proven leadership ability

Hardware/Firmware Engineer (6+ years of hands on experience preferred):

This role is responsible for implementing communication systems algorithms in FPGA firmware and working closely with systems engineering, digital hardware, and embedded software teams. The right person for this job will have implemented communications systems on FPGA before and is able to build signal processing blocks, not just connect predefined blocks together.

Required:

- Experience working with Altera and Xilinx processors and toolsets
- Firmware development experience particularly for RFID or other wireless systems (EPC GEN2, 802.11, cellular, etc)
- Broad understanding of wireless communications systems and signal processing
- Hands-on experience in integrating and testing FPGA implementations within a larger hardware platform
- Experience developing test frameworks and matching test vectors with simulation
- Desire to work with intelligent, ambitious, and humble individuals in a fast-paced, invention-driven, start-up environment
- Eagerness to build a world-class engineering team and positive, collaborative culture

Preferred:

- Strong understanding of wireless communications systems and signal processing
- Experience migrating FPGA design to ASIC
- MSEE, PhD, or equivalent work experience
- Proven leadership ability

RF Engineer (5+ years of RF design experience preferred):

This role is responsible for designing board-level RF systems using a mix of RFICs and discrete components. The right person for this position will have experience in RF board design, supporting layout, board-level test, and transition to production.

Required:

- Experience working in building RF systems from a combination of discrete and integrated components
- Experience taking design from concept through production
- Working experience with tools such as Microwave Office, ADS, Pads, and HFSS
- Experience with PCB design and debug
- Strong background in cascade analysis
- Experience interfacing with systems engineering, digital design, layout, production, QA, and test teams
- Desire to work with intelligent, ambitious, and humble individuals in a fast-paced, invention-driven, start-up environment

Preferred:

- UHF RFID experience
- System-level knowledge including ability to develop and analyze link budgets
- Experience with phased arrays and/or MIMO
- Intermediate knowledge/experience in at least one of the technologies: 802.11, 3GPP, EPCGen2, Bluetooth

Digital Board Designer (5+ years of experience preferred):

This position is responsible for the design and test of embedded digital systems with advanced processors including FPGAs, DSPs, GPPs, and GPUs. The right person for this job will have experience designing, supporting layout, testing, and transitioning digital board designs to production.

Required:

- Experience going from prototype to production
- Experience integrating ADCs, FPGAs, DSPs, GPPs, and GPUs into board
- Working experience with digital design tools (e.g. Orcad)
- Knowledge of power supply design
- Experience with high speed memory interfaces
- Design for test and manufacturability
- Experience interfacing with systems engineering, digital design, layout, production, QA, and test teams
- Desire to work with intelligent, ambitious, and humble individuals in a fast-paced, invention-driven, start-up environment

Preferred:

- Deep familiarity with layout and layout tools (e.g. Pads)
- Some RF design familiarity
- Experience with FPGA design
- Familiarity with Intel Architecture
- Specific experience with GPUs

If you're interested in any of the above positions, please send your resume and cover letter to [jobs\(at\)skip.it](mailto:jobs@skip.it)

Thanks for your interest in **Skip!**

Best,

Spencer Hewett

Founder