

JSPEC-003-SeniorSoftwareEngineerV4

Job Title:	Senior Software Engineer – IPS Group (Internet Protocol Suite)	
Department/Group:	Engineering	
Reports To	Head of Engineering	
Job Description		

## Summary of role

Airtel ATN is a provider of networking components that are used in civil aviation. One area of Airtel ATN's mission is to carry out exploratory work on the future communication technologies that can be used in civil aviation.

Along with other industry partners, Airtel ATN works on the ATN/IPS which is the next generation communication network that is based on IPv6 and utilizes heterogenous air/ground datalink technologies.

Airtel ATN is looking for Senior Software Engineers to strengthen the IPS team.

#### Responsibilities

You will be responsible for:

- Designing and coding solutions for ATN/IPS.
- Creating documentation for the developed code (APIs, design documents).
- Creating tests for the developed code.
- Contribution to the ATN/IPS standardisation process.
- Supporting ATN/IPS verification activities in European R&D programmes.
- Taking ownership of code components and working on their evolution.
- Mentoring junior team members.

Essential skills:

- Proficient in writing embedded C code for platforms with limited resources.
- Proficient in writing a portable code that can run on various CPU architectures.
- Very good understanding of IP networks, IPv6 protocol stack and functions of modern IP routers (e.g. policy-based routing, multihoming and mobility).
- Good understanding of security protocols such as TLS/DTLS.
- Proficient in developing and testing code in Linux environment (e.g. socket API, event driven programming, threads).
- Good experience in shell scripting.
- Good experience with debugging tools such as gdb, valgrind, etc...
- Proficient with Git (Gitlab).



# Desired skills:

- Experience in programming in C++, Python.
- Good knowledge of GNU build tools: autoconf, automake, libtool, make.
- Familiarity with Wireshark (dissectors).
- Familiarity with XEN and Virtualbox virtualization platforms.
- Familiarity with Linux containers and Docker.

## Work environment:

- Languages: C, C++, Python, TCL.
- Linux development environment.
- Git source control system.
- Gitlab CI.
- Occasional travel and on-site customer support.
- Occasional participation industry focused exhibitions.

## Quality

• Understand and conform to the quality management system in Airtel ATN

#### Verification

- Demonstrate awareness of test cases & verification process
- Understand and capable of creating test instructions and contribute to manual testing

#### Support and customer interaction

- Interact with customers about specific technical topics (technical support)
- Make overall product and solution presentations to large customer audiences
- Design and deliver project-specific customer training
- Lead and/or support onsite delivery

## Market and Business

- Attend exhibitions for knowledge and as tech support
- Keep up to date with general industry trends and customer needs
- Maintain an awareness of financials and how your actions affect the company
- Provide support to customers and team throughout project lifecycle
- Understand company technology roadmap

## **Personal and Professional Development**

- Take ownership of personal and professional development
- Mentoring Software Engineers
- Coaching and Training



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Qualifications			
Bachelor's degree in Computer Science or Engineering discipline or equivalent experience			
Note: This job description is not intended to be all-inclusive. Employee may perform other related duties as required to meet the ongoing needs of Airtel			
Last Updated By:	HR Department	Date: 02nd November 2022	