4067 6672 Wireless Systems Engineer (Early Careers) ## Summary  
  
Role Number: 200460411  
  
Imagine what you could do here. At Apple, new ideas have a way of becoming extraordinary products, services, and customer experiences very quickly. Bring passion and dedication to your job and there's no telling what you could accomplish! Join us to help deliver the next groundbreaking Apple product. Do you love working on challenges that no one has solved yet? As a member of our dynamic group, you will have the unique and rewarding opportunity to craft upcoming products that will delight and inspire millions of Apple’s customers every single day.   
 Wireless technologies have become a crucial part of all Apple devices that delight our customers. With the latest developments in cellular, we apply a sophisticated simulation platform to study performance of our devices in complicated radio and network conditions and gain insights for system design. We are looking for an expert PHY Systems Engineer who has a deep understanding of wireless technology. In this role you will be at the centre of a silicon design group responsible for physical layer system and algorithm design for pioneering wireless SoC products, with a focus in wireless system design, modeling, and simulations.  
  
## Key Qualifications  
  
- Deep knowledge of communication system theory and PHY signal processing  
- Validated track-record in SW and link/system level simulator design in C/C++, including experience with simulator frameworks and configuration management.  
- In-depth knowledge of wireless communication systems with hands-on experience in 4G/5G PHY design, pre-silicon verification and critical metric testing.  
- Experience with Matlab, C/C++ and/or Python including significant knowledge of algorithms and data structures, memory and runtime profiling as well as code optimization techniques.  
- Solid knowledge of current cellular communication standards: 5G (NR) and 4G (LTE).  
- Work experience related to RAN1/RAN4 submissions is a good plus  
- Strong analytical and problem-solving skills (linear algebra, random processes, detection and estimation, debugging and fixing of defects, …).  
- Ability to fluently speak and write in English.  
  
## Description  
  
The candidate will take part in the pioneering work of designing and developing innovative cross-layer simulation model infrastructure and tool sets, which will play an important role in cellular R&D across teams within Apple. The responsibilities will include but not limited to:  
  
- Collaborate across teams to define/ document project requirements, including model architecture, interfaces, and feature sets.  
- 4G/5G PHY/MAC layer abstraction/modeling, and interfacing with higher layers via external simulators.  
- Contribute to the design and implementation of innovative algorithms on 3GPP standardization process (e.g., RAN1, RAN4) for future-generation cellular communication systems.  
- Design test cases for feature verification, drive feature bring-up and issue resolution.  
- Work on simulation framework related topics, such as regression infrastructure development, test coverage definition, automation scripting generation, tool and library integration.  
- Design and implement user friendly GUIs in collaboration with customer teams, to meet project requirements.  
  
## Education & Experience  
  
BSc/MSc/BEng/MEng/PhD in related field. IT-System administrator/in None 2023-03-07 15:58:53.635000