The Hong Kong Applied Science and Technology Research Institute (ASTRI) was founded by the Government of the Hong Kong Special Administrative Region in 2000 with the mission of enhancing Hong Kong's competitiveness through applied research. ASTRI's core R&D competence in various areas is grouped under five Technology Divisions: AI and Big Data Analytics; Communications; Cybersecurity, Cryptography and Trusted Technologies; Integrated Circuits and Systems; and IoT and Sensors. It is applied across five core areas which are Smart City, Financial Technologies, Intelligent Manufacturing, Digital Health, and Application Specific Integrated Circuits.

Over the years, ASTRI has nurtured a pool of research, I&T talents and received numerous international awards for its pioneering innovations as well as outstanding business and community contributions. To date, ASTRI has transferred over 750 technologies to the industries and been granted more than 900 patents in the Mainland, the US, and other countries.

Title	Associate Principal Engineer / Senior Lead Engineer, Wireless Systems Design (5G baseband algorithm)
Job Ref No.	CTO/COM/ESYS/2725a-c/210421 (Please quote this Job Ref No. with your application.)

Job Responsibilities

- Participate and contribute to physical layer (PHY) algorithm design and system verifications in ASTRI's 5G/6G research and development projects. Engaging activities including the followings:
  - theoretical analysis
  - computer-aided simulation/analysis
  - participation in design and review sessions
  - standard compliance verification systems design and development
  - contribution to ASTRI's patent portfolio
  - systems support for DSP and FPGA implementation
  - tracking and analysing evolvement of latest standard (e.g., 5G and beyond, V2X, mMTC, Unlicensed and shared spectrum)
  - technical contributions towards proprietary or public air interface specifications

- Experienced candidates will be managing the engineering team to achieve target design goals

Requirement

- Master's or Doctorate degree holder in Electronic Engineering, Information Systems, Computer Science, Computer Engineering or relevant disciplines with minimum 3 years of related experiences. Candidate with less experiences may also be considered.
- Proven track record with innovative problem solving and hands-on experience in design, development, testing, standardization and evaluation of digital wireless systems (e.g., 5G/NR, 5G beyond, LTE, V2X, NB-IoT, Wi-Fi) will be an advantage
- Extensive knowledge of radio communication theory and digital signal processing, as well as a solid background in cellular communication systems across PHY, MAC and Signalling layers, is preferred

- Background in one or more of the following skills and experience will be an advantage:
  - Wireless physical layer (PHY) algorithm design
  - Mobile broadband, Mission Critical, Vehicular Communications, Machine Type Communications
  - Information theory, Coding theory, Adaptive filtering, Signal Detection and Estimation, Digital Communications, Wireless Communications
  - Modem algorithms design, including channel and interference estimation, advanced receivers, decoders, tracking loops, techniques to mitigate RF distortions
  - Interference and mobility management in radio access networks, interference cancellation, equalization, multi-user detection
  - OFDMA and CDMA based FDD/TDD licensed/unlicensed systems
  - Modem implementation
  - Demonstrated skills in the design of communications simulation tools
  - Standard conformance testing and test infrastructure development skills
- Programming/scripting skills in MATLAB, Python, C/C++ is a plus
- Strong communication and presentation skills in English, Cantonese, and Mandarin
- Lives ASTRI values

Application

The appointment will be on renewable contract terms with a competitive salary and performance-linked variable pay. Fringe benefits include paid leave, medical and dental benefits, insurance coverage and contribution to MPF. The incumbent will normally work a five-day week.

Interested candidates, please send an application (quoting Ref. No.) with a detailed resume, current and expected salary to Talent Acquisition via email to careers@astri.org

The application will be open until the position is filled. Only short-listed candidates will be notified. ASTRI reserves the right not to fill the position.

ASTRI is an Equal Opportunities Employer. Personal data provided by job applicants will be used exclusively for recruitment only.