



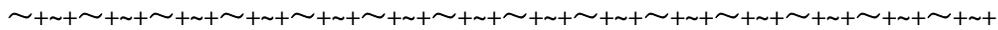
# Huawei Technologies, Inc.

*Looking for the best talents to build the best products*

Founded in 1987 as an employee-owned private company with headquarter in Shenzhen, China, Huawei becomes a leading global ICT solutions provider serving more than one third of the world's population. Through our dedication to customer-centric innovation and strong partnerships, we have established E2E advantages in telecom networks, devices and cloud computing. We are committed to creating maximum value for telecom operators, enterprises and consumers by providing competitive ICT solutions and services. Huawei solutions have been deployed by 45 of the world's top 50 telecom operators and deployed in over 170 countries and regions. Huawei appreciates the power of technology. We invest over 10% of our annual sales revenue into R&D and more than 45% of our 170,000 employees engage in R&D.

Leveraging our experience and expertise in the ICT sector, we help bridge the digital divide and promote high-quality broadband connectivity for all. As an advocate of socioeconomic sustainability, we make every effort to support secure and stable network operations, and help customers and industries improve efficiency to drive low-carbon economic growth. By localizing our operations and building a global value chain, we help local innovators maximize their global value and share win-win outcomes. A better connected world is on the horizon. Working closely with partners, we endeavor to build an efficient and integrated digital logistics system which will enhance interconnectivity and interactivity – between people and people, people and things, and things and things – to spark infinite opportunities and potential for everyone everywhere and to move the world forward.

We are seeking creative, innovative, passionate, self-motivated candidates to join us at all levels. For those who have interest to explore the job opportunities at Huawei, please contact the recruiting responsible person.



## Job Titles & Contacts

**Group #1:** Please contact Jim Wright ([Jim.Wright@huawei.com](mailto:Jim.Wright@huawei.com)) or Jason Hu ([hushaozhi@huawei.com](mailto:hushaozhi@huawei.com))

1. IC PI/SI Expert
2. IC Package Design Expert
3. IC Verification Expert
4. IC Research Environment Expert
5. IC Backend Expert
6. SSD Controller Chip Architect
7. Cloud-Server System Solution Architect
8. PCIe expert
9. Inter-chip Cache coherency architect
10. CPU Chief Architect, Multi-thread Data Plane Processor
11. Chip reliability expert
12. Expert in CMOS process
13. Package engineering expert
14. ATE production test expert
15. Image Processing Algorithm Expert
16. CPU Random Instruction Generator Expert
17. Sr. Audio Architect
18. Sr. Computer Vision Expert
19. Sr. Deep Learning Expert



3. IC top level floor planning including hard macro block placement, padding, RDL and bump pattern/assignment
4. Package pinouts optimization incorporating system level trade-offs of pad/bump assignment, package routing and PCB target component pinouts
5. Working with marketing/IC/product teams on competitive analysis and road mapping package technology for future products
6. Advanced packaging technology development

**Job Requirements:**

1. 8+ years of IC package design and development experience in IC industry
2. Experience in advanced package, high performance flip chip package, SiP, FCCSP etc
3. Strong background in mechanics and materials

**IC Verification Expert**

**Job description:**

1. Research the company level verification method and technique for the efficiency and quality promotion
2. Provide IC Verification solution for IC project such as CPU
3. Working with marketing/IC/product teams on competitive analysis and road mapping Verification technology for future products
4. Advanced Verification technology development (ESL\EDA\Formal and so on)

**Job Requirements:**

1. 8+ years of IC package design and development experience in IC industry
2. Experience in advanced package, high performance flipchip package, SiP, FCCSP etc
3. Strong background in mechanics and materials

**IC Research Environment Expert**

**Job description:**

1. Cooperate with IT to support IC engineer to resolve EDA and IT issues as level 1 support.
2. EDA License and resource needed by users.
3. Making strategy and solution for IC design environment and system.

**Job Requirements:**

1. Good understanding of Linux, network, NAS and script skill (schrc/bash/perl).
2. Experience for setup or maintenance IC design environment including IT system and EDA.
3. Familiar with IC design flow and EDA tools.

**IC Backend Expert**

**Job description:**

Responsible for physical architecture implementation of large, complex, high-performance CMOS chips, focus on physical design, partitioning, floor planning, physical verification and reliability verification.

**Job Requirements:**

1. 8+ years experience on physical design and at least successfully tapeout one 40nm or 28nm chip.
2. Experienced in Place & Route timing closure, synthesis, Static Timing Analysis.
3. A solid understanding of synthesis with Synopsys Design Compiler, timing driven layout and post-layout timing analysis with PrimeTime of deep sub-micron designs is essential.

**SSD Controller Chip Architect**

**Job description:**

1. Responsible for custom requirement analysis, competitors' analysis and specification definition of SSD controller.
2. Lead chip architecture design and ensure product's competitiveness (such as performance, cost, power efficiency and reliability, etc.), complete paper floor plan and make sure it is friendly for backend physical implementation.
3. Complete algorithm specification of storage medium's management and allocation, as well as the algorithm specification of medium error correction and guide SSD controller development.
4. Complete industry technology foresight trends analysis, and communicate with key vendors of storage medium. Responsible for proposing the next three years' technology evolution roadmap and key sandbox technology, lead the research of key technologies and algorithms.

**Job Requirements:**

1. Very familiar with key storage controller algorithm, good experience of storage medium management and allocation algorithm, familiar with RAID algorithms.
2. Good hands-on experience of storage medium error correction algorithms, good knowledge on the advantage and limit of various algorithms.
3. Familiar with current mainstream NAND Flash storage medium feature and corresponding solutions.
4. Familiar with key features and architecture of current mainstream SSD controller's and good knowledge on design solutions for key features. Familiar with protocol standards of SATA, SAS, PCIe, EMMC, ONFI, UFS, Toggle etc.
5. Good hands-on experience of full design flow from architecture design to circuit design and implementation, and co-design experience of software and hardware.

**Cloud-Server System Solution Architect**

**Job description:**

1. Responsible for custom requirement analysis and specification definition of Cloud-Server processor, to define a chip spec. From the perspective of overall data center solution and conduct co-design of software and hardware.
2. Responsible for architecture design of Cloud-Server processor, to complete the partition between software and hardware, and to improve processor architecture from the perspective of server's

business and performance optimization, such as some new instruction and hardware accelerator identification.

3. Take part in Cloud-Server performance evaluation, based on server's mainstream benchmark and critical segment or snapshot of real-world application scenario, provide advice for chip architecture and performance modeling.

**Job Requirements:**

1. Proficient at server processor's application scenario and system solution, such as WEB SERVER, BIG DATA (HADOOP+JAVA), DATABASE and HPC. Familiar with server's mainstream benchmark.
2. Familiar with mutual interactions among server's internal subsystems or functional modules, good knowledge on how to improve interaction performance or efficiency among subsystems or functional components.
3. Good knowledge on software programming model and ecosystem of Cloud-Server, familiar with server's software design kit (libraries and functions, such as DPDK or Open Data Plane).
4. Good experience of complete at least one key server subsystem (such as network subsystems, storage, or high-speed IO) solution design and implementation independently.

**PCIe expert**

**Job description:**

1. We provide PCIe controller, switch and related IP to our company's SOC teams in areas of computer servers, networking and home terminals etc. This PCIe Architect shall drive the overall direction of next generation PCIe products and would be responsible for their quality and the competitiveness.
2. impactful role requires a candidate who is a self-starter and possesses deep knowledge of the networking and server industries; and has extensive knowledge of the PCIe Protocols, DMA and Single Root IO Virtualization Space.
3. Specific responsibilities will include but are not limited to the following:
  - Be responsible for the feature requirement and architecture definition of the in-house PCIe Controller and Switch IP. Define test plan and sign-off criteria to ensure IP quality.
  - As an architect, participate in the development of the IP to ensure correct implementations. Help drive and resolve critical technical issues along the development.
  - Pay close attention to PCIe Protocol and the trend of development for PCIe interface in industry. Provide regular updates and work with technology planning to drive the directions for next generation IP and silicon solutions
  - Understand and characterize real-world applications for PCIe IP (for example, virtualization, hyper-scale datacenters, Backplane Connectivity). Conduct competitive analysis with other industry products. Identify weakness and provide solutions.
  - Interact directly with customers to gain understanding of customer applications and use models of our IP. Identify key gaps and drive cross functional effort to address these gaps

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### **Inter-chip Cache coherency architect**

#### **Job description:**

1. Responsible for custom requirement analysis, competitors' analysis and performance evaluation methodology of inter-chip cache coherency subsystem.
2. Responsible for architecture design of inter-chip cache coherency, such as multi-chip interconnection topology and routing algorithm, complete micro-architecture of internal pipeline and coherency sparse directory and make sure it is friendly for backend physical implementation.
3. Responsible for latency optimization of intra and inter-chip cache coherency protocol implementation.
4. Responsible for protocol optimization and evolution of inter-chip cache coherency.

#### **Job Requirements:**

1. Familiar with protocol and corresponding micro-architecture of multi-chip cache coherency and good experience of multi-chip cache coherency design and implementation, such as typical home snooping, sparse directory and knowledge of protocol implementation in case of many kinds of corner case.
2. Good hands-on experience of typical multi-chip interconnection topology and knowledge of how to deal with performance issue and functional dead-lock issue effectively during architecture implementation.
3. Good hands-on experience of full design flow from architecture design to circuit design and implementation, and co-design experience of software and hardware.

### **CPU Chief Architect, Multi-thread Data Plane Processor**

#### **Job description:**

1. The Multi-thread Data Plane Processor Architect will take charge in defining a processor core that meets the requirement of high performance, high bandwidth, and scalable networking architecture.

2. This architect will utilize multi-thread processor experience to deliver a world-class data plane processor ASIC with many advanced features for networking products.

**Job Requirements:**

1. Solid understanding of general purpose CPU micro-architecture, including knowledge of areas such as processor pipelines, load store unit, caches, cache coherence, memory hierarchy, multi-processor, multi-thread processor systems.
2. To make trade-offs between power, performance and area appropriately to meet the requirements of the product.
3. Hand-on experience with high power-efficient CPU core successfully.
4. Understanding of CPU instruction set architecture and assembly language.
5. Ownership of the overall verification methodology for a CPU project.

**Chip reliability expert**

**Job description:**

1. Identify high risk failure modes early in the design life cycle.
2. Develop new tests based on the physics of failure and any novel user interactions that the new technology enables.
3. Drive test equipment and test specs that are critical for validation of reliability Assess reliability through stress test data and failure analysis
4. Provide direction for failure analysis to drive toward root cause

**Job Requirements:**

1. Experience performing reliability testing including HTOL,ESD&LU, Environmental Testing ,Mechanical Stress Tests, Shock/Drop/Vibration Testing,
2. Failure Analysis analytical techniques (Optical Microscopy, X-Ray, SEM/EDS, FTIR, XPS etc)
3. Ability to use fundamental failure analysis methodology to derive a root cause of failure
4. Knowledge of industry test Standards (JEDEC, AEC etc)
5. Solid understanding of wafer/assembly process
6. Application of DOE (design of Experiments)
7. Application of FMEA (Failure Modes an Effects Analysis
8. Adept in statistical data analysis and clear reporting
9. Strong understanding of the physics behind material properties (mechanical, electrical, and optical).
10. Engineering degree and 5+ years of experience in a related field or industry required. MS or PhD is preferred

**Expert in CMOS process**

**Job description:**

1. Driving continuous process improvement for mass production cooperated with supplier's engineering teams to achieve best-in-class quality. Monitor CMOS product mass production quality and yield (wafer/assembly/test), manage yield excursion and production bottle-neck issues with minimum risk to supply and end-customers.

2. Bridge between design groups and Suppliers to facilitate and enhance the understanding of Suppliers' process/design rule/model changes and the impact to designs. Understand and address design group's concerns/requirement and drive Suppliers for closure.
3. Evaluate CMOS product evolution and participate in internal roadmap discussions with design and management teams, recommend suitable processes and suppliers for R&D.
4. Negotiate with Suppliers for development schedule, new technology offering/options ,drive Suppliers to meet process development and qualification schedules, and to meet fabless requirements for process stability and reliability prior to production release.
5. Work closely with design team to ensure processes meet design requirements, Resolve yield, quality and reliability issues in the qualification of new devices.
6. Assist project management team to establish the process system

**Job Requirements:**

1. Master degree and above in semiconductor related field
2. More than 15 years of IC process or manufacturing experience, with the Foundry or Fabless engineering technology development and production experience
3. Willing to work in Shanghai is preferred
4. Strong communication and organization skills
5. Good Written and oral skill in English
6. Teamwork spirit

**Package Engineering Expert**

**Job description:**

1. Monitor and improve the Quality、Yield and manufacture stability Cooperated with the Assembly Vendor
2. Assembly technical trend and NPI strategy of new assembly Type
3. Bridge the design team and Supply vendor to enhance and Speedup the Risk assessment and collaboration
4. Enhance the engineer manufacture Quality system to ensure the Overall manufacture quality

**Job Requirements:**

1. More than 10 years IC Assembly manufactures experience and familiar with the industry technical trend and Vendor
2. Familiar with NPI process (FOP/FC etc) and Mass Production
3. Willing to work in Shanghai and Taiwan is preferred
4. Strong communication and organization skills
5. Good Written and oral skill in English
6. Teamwork spirit

**ATE Production Test Expert**

**Job description:**

1. Responsible for production testing data mining, drive quality, yield, design and project promotion
2. Responsible for OSAT production import quality system and production monitoring system, Audit on a regular basis;
3. Abnormal production analysis and hold lot quality problem analysis, expert advice is given;
4. New production engineering and technical research, and Ensure the production test manufacturability

**Job Requirements:**

1. More than 13 years experience in simulation, RF chip verification or production test development, Skilled use of 93k or UFLEX is preferred
2. abundant data analysis ability, write or use data analysis software, build big data platform
3. Have large IDM, OSAT work experience, responsible for the product for the competitiveness of the industry benchmark

**Image Processing Algorithm Expert**

**Job description:**

1. Be responsible for defining and exploring ISP 3A algorithm and whole hardware pipeline algorithm architecture with C/C++ framework simulation
2. Deep dive into brightness, color and noise algorithm and leading algorithm development, continue improving basic image quality user experiences and deliver the best ISP in the world.
3. Work with Huawei other group like PQ, ARCH, ASIC, FW to design the most competitive algorithm end to end.
4. Interact with industry to customize the best image sensor technology. Join in international meeting to innovate ISP capture technology like light filed camera, structured light and hyper spectral imaging etc. which make Huawei Phone is the first to adopt disruptive technology and improve user experience.
5. Collaborate with universities to do advanced algorithm research, file patent and contribute to establish global technology leadership in industry.

**Job requirements:**

1. PhD/MS degree in image signal processing / computer vision with 10 years of algorithm hands-on experience, at least 5 years of ISP experience.
2. Deep understanding of ISP algorithms and full Pipeline: AE, AWB, AF , RawNF, YUV2DNR , TNR , Sharpen , Demosaic , Scaler , SR , MTFC , CC , CE , HDR, DMAP...
3. Hands on whole pipeline image quality tuning and end to end tuning including lens and image sensor experiences. Deep understanding of image quality interaction among brightness, color and noise.
4. Solid knowledge of mathematics like calculus, linear algebra, probability, signal and system.
5. Hands on algorithm ASIC implementation. Sensitive to algorithm area, power, bandwidth. Familiar with algorithm implementation on ARM/DSP/GPU.

**CPU Random Instruction Generator Expert**

**Job description:**

1. Define and develop random test generation tool set for design verification of in-house developed processor cores.
2. Responsible for building the infrastructure to sustain continuous bug finding from random failures with testing environment to reproduce failures at RTL/EDA simulation.

**Job requirements:**

Good understanding of CPU architecture, especially ARM processor architecture and its implementation.

1. Hands-on experience of random instruction generation tools and constrain random test methodology.
2. Hands-on experience of software project development in C, C++ programming language and had previous experience in developing and maintaining major software infrastructure construction.
3. Previous functional verification and debugging experience is highly preferred.
4. Must be a highly organized, detail-oriented self-starter, who works well independently, as well as in a team environment

**Sr. Audio Architect**

**Job description:**

1. In Charge of audio system and audio chip competence and roadmap analysis for mobile device product.
2. In Charge of technique planning and version deployment for mobile audio system.
3. In Charge of architecture development for mobile audio device, including the audio performance and the audio power consumption specification development.

**Job requirements:**

1. Familiar with varies of index and spec for audio chip.
2. Familiar with various index and spec of the audio chip, and obtain the experience to lead a team to pursue a sustained product success.
3. Familiar with mobile audio system, and has a variety of mobile devices and audio system development experience, and can lead an audio architecture evolution under the guidance of audio test result.
4. The preferred candidates should obtain the experience of implement a HIFI system, have a solid understanding about HIFI system, be capable to implement a complete HIFI system based on the platform of mobile device.

**Sr. Computer Vision Expert**

**Job description:**

1. Architecture definition on CV related SOC.
2. Architecture definition on CV based processor.
3. Leading team to develop cut-edge CV technology to model real-world problems and bring it to reality.
4. Responsible for system design, hardware/software partition, hardware architecture design, micro architecture design.

5. Lead team to deliver.

**Job requirements:**

1. MS/PhD degree in EE/CE with Min. 10 years of ASIC/Processor design hands-on experience.
2. Min.5 year experiences on computer vision related project, for example autonomous driving, ADAS or robotics
3. Strong understanding on deep learning, especially CNN.
4. Extensive experience on OpenCV.

**Sr. Deep Learning Expert**

**Job description:**

1. Leading team to develop power-efficient DNN Processor core.
2. Leading team to develop novel deep learning model specific to real-time problems and bring it to reality.
3. Leading team to deliver.

**Job requirements:**

1. MS/PhD degree in EE/CE with Min. 10 years of ASIC/Processor design hands-on experience.
2. Min. 5 year experiences on deep learning project, for example image/video recognition/retrieval, real-time scene understanding.
3. Strong understanding and hands-on experience on deep learning, especially CNN&RNN modeling, CNN&RNN application and implementation.
4. Strong publication records/or project records.

**Manager of Technical Planning on Mobile SoC Chip**

**Location: Santa Clara, CA**

**Description:**

This is a very creative, demanding, and rewarding job in a world class team in the Silicon Valley. Build vision and roadmap for the company's IC technology element to lead the world of mobile computing. Candidate is required to have a deep knowledge of IC design, Mobile computing and OS with solid engineering background on SoC.

**Responsibilities:**

1. Grow mobile OS and ecosystem partnership with startups, universities and other strategic alliances.
2. Identify critical future IC technology elements and build roadmap for SoC mobile computing.
3. Work with Headquarter teams to plan and deliver the identified technologies, intercept those with winning products
4. Attend technical conferences on Mobile computing and participate in the relevant standards committees.



- Oversee factory test team on production optimization

#### JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)

##### Education:

Minimum: Master's Degree

Preferred: Doctoral/Professional Degree

Major/Discipline: Electrical Engineering, Electronics Communications or Related Field

##### Relevant Work Experience

Minimum: 8+ years of RF systems engineering

Preferred: 12+ years of RF systems engineering and architecture experience

##### Skills & Abilities: (Technical or General)

###### Minimum Requirements:

- Direct experience in transceiver architecture and transceiver circuit design.
- Solid understanding of RF front-end architecture, RF components (power amplifiers, LNAs, switches, filters, etc), RF device technologies, and advanced packaging techniques.
- Solid understanding of wireless technology, including GSM, UMTS, CDMA, LTE, LTE-A, and IEEE 802.11.
- In-depth knowledge of wireless industry standards and carrier specific requirements to achieve successful product certification.
- Experience with RF lab equipment.
- Strong communications and documentation skills.
- Excellent problem solving and analytical skills.

###### Preferred:

- Familiarity with RFIC design and development processes.
- Ability to effectively lead cross-functional teams.

#### **Staff/Principal Engineer - RF/Antenna**

**Location: Santa Clara, CA & San Diego, CA**

The Staff/Principal Engineer (Antenna/RF) will lead and/or participate in the research, design and development of mobile device antenna and RF activities at Huawei Device USA. The ideal candidate will have a combination of 8 years experience developing mobile device hardware. Five years of experience at a globally recognized mobile device company is preferred.

##### Job Specifications:

- Participate and/or lead in the research, design and development of mobile device antenna and RF activities.
- Debug and optimize OTA system performance to meet customer requirements and ensure compliance with FCC SAR/HAC regulations.
- Perform pre-research activities in new antenna and RF subsystem technologies.
- Improve and develop antenna/RF R&D tools, software, and testing methods.
- Conduct antenna/RF simulation with commercial tools (XFDTD and ADS preferred).
- Communicate with engineers globally on R&D projects as needed.
- Global travel required (less than 15%)

##### Education:

Minimum: Bachelor of Science or equivalent  
Preferred MS or Ph.D.  
Major/Discipline: Electrical Engineering or equivalent

#### Relevant Work Experience

Minimum 8 years experience developing mobile device hardware.  
Preferred 5 years or more experience in mobile device company globally recognized

#### Skills & Abilities:

- Strong experience in hardware design and development on antenna/RF for 2G/3G/4G mobile devices with WiFi/GPS/NFC.
- Skills on antenna/RF simulation, debugging, optimization and testing.
- Knowledge in electronic engineering (electromagnetic field and microwave technology).

### **Principal SAR Engineer**

**Location: Santa Clara, CA**

#### GENERAL SUMMARY:

The Principal SAR Engineer will lead the SAR optimization strategy to ensure that all Huawei wireless products are compliant with regulatory requirements and process, including FCC, PTCRB, CTIA, ETSI, TIA/EIA, etc. The candidate is expected to coordinate a team effort including antenna, RF, hardware, and software engineers responsible for developing cutting-edge product solutions with the highest safety standards.

#### DUTIES AND RESPONSIBILITIES: Essential Functions

- Lead SAR optimization strategy to ensure that all Huawei wireless products are compliant with regulatory requirements and process, such as FCC, PTCRB, CTIA, ETSI, TIA/EIA, etc.
- Manage end-to-end development of new SAR optimization solution, including drafting technical proposals, coordinating development/validation plans, and analyzing test results.
- Facilitate communication with various government entities across the world, with the focus on FCC.

#### JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)

##### Education

Minimum: Bachelor's Degree  
Preferred: Master's Degree  
Major/Discipline: Electrical Engineering, Electronics Communications or related field

##### Relevant Work Experience

Minimum: 8+ years of antenna, SAR, and HAC development experience of wireless devices.  
Preferred: 12+ years of antenna, SAR, and HAC development experience of wireless devices.

##### Skills & Abilities: (Technical or General)

###### Minimum Requirements:

- Working knowledge of antenna and RF concepts used in wireless communications.
- Working knowledge of regulatory process in wireless device certification.
- Experience in antenna measurements, including passive antenna tests, wireless Over-The-Air (OTA) tests, SAR, and HAC tests.

- Knowledge of test standards and requirements for CDMA, GSM/GPRS/EDGE, UMTS, 802.11, and LTE cellular systems.
- Excellent verbal and written communication skills.

Preferred:

- Knowledge of working mechanism of various sensing technologies in wireless devices.
- Knowledge of wireless baseband architecture.

### **RF/Antenna Lab Manager (Contract)**

**Location: Santa Clara, CA**

#### GENERAL SUMMARY:

The RF/Antenna Lab Manager (Contract) will support the development of a new RF/Antenna lab in bay area and provide management of daily lab maintenance.

#### DUTIES AND RESPONSIBILITIES: Essential Functions

- Maintain functionality of measurement equipment in a RF/Antenna lab such as passive and active antenna measurement system, SAR system, and HAC measurement system.
- Coordinate regular calibration service, debug, and repair with vendors.
- Help enforce lab regulatory compliance according to government regulations and safety guidelines.
- Support lab supply procurement and manage inventory and storage.
- Resolve IT and facilities issues by coordinating internal/external resources.

#### JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities);

Education:

Minimum: Associate's Degree

Preferred: Bachelor's Degree

Major/Discipline: Electronics Communications

Relevant Work Experience

Minimum: 1+ year of experience in RF/Antenna lab management

Preferred: 2+ years of experience in RF/Antenna lab management

Skills & Abilities: (Technical or General)

Minimum Requirements:

- Basic understanding of electrical design and IT network.
- Basic understanding of RF/Antenna testing equipment.
- Familiarity with regulatory requirements for RF/Antenna labs.
- Self driven and well organized.
- Excellent verbal and written communication skills.

Preferred:

- Working experience with RF/Antenna design.

### **Cloud Architect, PaaS**

**Location: Santa Clara, CA**

## GENERAL SUMMARY:

The Cloud Architect, PaaS will lead the effort of building and evolving a Platform-as-a-Service (PaaS) solution. In this role, you will design the architecture and define technology roadmap of a hybrid PaaS platform that includes application runtimes, distributed middleware, frameworks and databases. Through this platform, services for Huawei's smartphones, wearables, and smart home devices can be quickly developed with reduced complexity. Responsibilities also include following open source projects and active involvement in collaboration with technology partners.

## DUTIES AND RESPONSIBILITIES: Essential Functions

- Design and improve common PaaS platform architecture for Huawei Consumer cloud services to achieve best-in-class quality in performance, reliability, safety, and easy-of-use.
- Design and improve distributed middleware, frameworks, and base services like database, blob storage, configuration, log, etc.
- Research new technologies and open source projects relevant to cloud platform and share trends and insights with global teams.
- Foster and support collaboration with external/internal technology partners.

## JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)

### Education:

Minimum: Bachelor's Degree

Preferred: Master's Degree

Major/Discipline: Computer Science or Related Field

### Relevant Work Experience

Minimum: 8+ years of experience in software development.

Preferred: 12+ years of experience in distributed software and API design

### Skills & Abilities: (Technical or General)

#### Minimum Requirements:

- Good knowledge of memory, threads/process, and networking on Linux
- Deep understanding of technologies in cloud computing, middleware, frameworks, and services.
- Proficient knowledge of SQL/NoSQL databases
- Proficient API design skill
- Expert in Java, C/C++ and scripting

#### Preferred:

- Proven experience in technical leadership.
- Hands-on development experience in AWS, Cloud Foundry, Heroku, Google App Engine.
- Proficient knowledge of Open Stack, Docker, Hadoop, Lucene/Solr.
- Experience in building PaaS platform internal features and components.
- Prior experience in the following industries: mobile device, gaming, payment, and content services.

## **Big Data Architect**

**Location: Santa Clara, CA**

## GENERAL SUMMARY:

The Big Data Architect will be responsible for architecture design, data modeling, and implementation of Big Data platform and analytic applications for Huawei consumer products. This position will contribute to development of innovative global mobile Internet services such as app store, game center, personal data synchronization, cloud photo, phone finder, and payment/wallet, etc.

**DUTIES AND RESPONSIBILITIES: Essential Functions**

- Perform architecture design, data modeling, and implementation of Big Data platform and analytic applications for Huawei consumer products.
- Analyze latest Big Data Analytic technologies and their innovative applications in both business intelligence analysis and new service offerings. Bring these insights and best practices to Huawei's global consumer business.
- Expand data as service collaboration with partners in US and other international markets.
- Apply deep learning capability to improve understanding of user behavior and data
- Develop highly scalable and extensible Big Data platform which enables collection, storage, modeling, and analysis of massive data sets from numerous channels.

**JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)**

**Education:**

Minimum: Master's Degree

Preferred: Doctoral/Professional Degree

Major/Discipline: Computer Science or Related Field

**Relevant Work Experience**

Minimum: 8+ years of experience in engineering and/or software development

Preferred: 12+ years of experience in engineering and/or software development

**Skills & Abilities: (Technical or General)**

**Minimum Requirements:**

- Over 8 years of engineering and/or software development experience.
- Hands-on experience in Big Data Components/Frameworks such as Hadoop, Spark, Storm, HBase, HDFS, Pig, Hive, Sqoop, Flume, Ozie, Avro, etc.
- Experience in architecture and implementation of large and highly complex projects.
- Deep understanding of cloud computing infrastructure and platforms.
- History of working successfully with multinational, cross-functional engineering teams.
- Proficiency in Java/C++, SQL/RDBM, and data warehousing.

**Preferred:**

- Experience in business domains like B2B, Advertising, Gaming and Finance Services
- Experience in big data platform and application development at a major Internet company.

**Staff/Principal Graphics Engineer**

**Location: San Diego, CA**

**GENERAL SUMMARY:**

The Staff/Principal Graphics Engineer will conduct research and design of software/firmware for GPU-based (Graphics Processing Unit) hardware used in Android products.

**DUTIES AND RESPONSIBILITIES: Essential Functions**

- Research methods of applying emerging GPU technologies to the Android software platform.
- Perform research on new OpenGL extensions to support Android Platform.
- Design and develop new hardware accelerator blocks to improve Android platform graphic power/performance.
- Identify new ways that the Android platform can most efficiently utilize the GPU.
- Prepare new project proposals to communicate research findings.
- Develop detailed project plans and provide leadership of technical execution.
- Identify future trends in GPU technologies and Android platform.

#### JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)

##### Education:

Minimum: Bachelor's Degree

Preferred: Master's or Ph.D.

Major/Discipline: Computer Science, Computer Vision or related field

##### Relevant Work Experience

Minimum: 7+ years of experience in R&D and software development for graphics

Preferred: 10+ years of experience in R&D and software development for graphics

##### Skills & Abilities: (Technical or General)

###### Minimum Requirements:

- Hands-on experience in GPU graphics pipeline technology and OpenGL development.
- Knowledge of Android graphics pipeline.
- Experience in developing project plans and leading technical teams.
- Proficiency in OpenCL, OpenVG, or Vulkan.
- Familiarity with iOS graphic architecture.

### **Senior Staff/Principal Camera Systems Engineer**

**Location: San Diego, CA**

#### GENERAL SUMMARY:

The Senior Staff/Principal Camera Systems Engineer will lead the research and development of next generation multimedia solutions for high volume smartphones, tablets, phablets, mobile broadband solutions, and wearable devices. The position is anticipated to produce high visibility impact affecting multimedia strategy, hardware design, and technology implementation. This role will build partnerships with U.S. universities, technology incubators, and start-up companies in addition to driving multimedia architecture design of new hardware platform solutions. Responsibilities also include development of a long-range multimedia roadmap focused on innovative Camera Systems.

#### DUTIES AND RESPONSIBILITIES: Essential Functions

- Research and identify next generation camera and imaging technologies in North America that can be adopted into smartphones and next-generation devices.
- Ensure system integration of key imaging technologies to achieve best-in-class image quality, including definition of system-level specifications.
- Identify new imaging innovations by building and maintaining long-term relationships with technology incubators, start-ups, and vendors.
- Conduct evaluations and prototypes of emerging camera solutions for integration with future mobile devices.

- Build a multi-year roadmap for camera and imaging technologies.
- Initiate and manage university research and cooperation projects in North America.
- Present monthly updates on multimedia technologies to headquarters executives.
- Collaborate extensively on system integration with cross-functional groups across Huawei Device.

#### JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)

##### Education:

Minimum: Bachelor's Degree

Preferred: Master's Degree

Major/Discipline: Electrical Engineering, Computer Science or related field

##### Relevant Work Experience

Minimum: 5+ years of experience in camera technology related to development of mobile devices and consumer electronics.

Preferred: 7+ years of experience in camera technology related to development of mobile devices and consumer electronics.

##### Skills & Abilities: (Technical or General)

###### Minimum Requirements:

- Broad system-level view and vision for the best next-generation camera systems
- Solid knowledge from hardware to software with strong imaging systems HW experience across key building blocks such as camera module design, CMOS image sensors, lenses/optics, AF actuators, and ISP/DSP.
- Strong understanding of image science concepts, image quality metrics, and optics design.
- Proven track record of integrating cameras into smartphones or similar device-level products.
- Familiar with mobile phone system architecture and peripherals: display, apps processor/ISP/GPU pipeline, flash LEDs, IR light sources, lasers, OIS, gyro, and sensors.
- Familiar with computational imaging: 3D depth sensing, Image Processing/Algorithms/ISPs, optics, image projection systems, computer vision, and machine learning concepts and applications.
- Availability for international and domestic travel required for visits to development sites and customer locations.

###### Preferred:

- Good understanding of the AR/VR landscape and industry.
- Experience with gesture systems and 3D scanning systems.
- Strong understanding of photography.
- Experience with multi-camera systems, multi-Image fusion algorithms, hyper-spectral imaging, and HDR video technologies.

#### **Senior Staff/Principal RF Systems Engineer**

**Location: San Diego, CA**

##### GENERAL SUMMARY:

The Senior Staff/Principal RF Systems Engineer will lead and participate in the research, design, and development of RF Front-End projects for mobile devices. This position will work as a member of a multidisciplinary team responsible for the development of PA, RF switches, and RF front-end modules for high volume and fast-paced cellular handset market.

**DUTIES AND RESPONSIBILITIES: Essential Functions**

- Analyze and resolve RF front-end related issues while working closely with engineering teams to achieve optimal OTA performance.
- Contribute to product development activities such as product definition, architecture, system, transistor-level circuit design, MCM design, layout/layout supervision, lab debug, and production support.
- Develop, train, and mentor RF/Antenna engineers.
- Work extensively with antenna teams and remote engineering teams to resolve RF challenges.

**JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities):**

**Education:**

Minimum: Master's Degree

Preferred: Doctoral/Professional Degree

Major/Discipline: Electrical Engineering or RF Engineering

**Relevant Work Experience**

Minimum: 8+ years of experience in RF systems engineering for mobile device industry

Preferred: 12+ years of experience in RF systems engineering for mobile device industry

**Skills & Abilities: (Technical or General)**

**Minimum Requirements:**

- Expertise in RF/microwave, RFIC design, SAW/BAW/FBAR filter, and PA product development.
- Hands-on experience in MCM artwork, EM simulation, and lab debug and tuning.
- Strong proficiency in circuit simulation tools utilizing Agilent ADS and other equipment.
- In-depth understanding of RF concepts such as impedance matching, impedance transformation, distributed systems, passive RLC and resonant circuits, noise, linearity, bandwidth, and stability.
- Solid expertise in device and process technologies, RF module packaging, and antenna technologies.

**Senior Staff Engineer, Camera Algorithms**

**Location: San Diego, CA**

The Senior Staff Engineer, Camera Algorithms will lead the research and development of next generation multimedia solutions for high volume smartphones, tablets, phablets, mobile broadband solutions, and wearable devices. The position is anticipated to produce high visibility impact to affect multimedia strategy, hardware design, and technology implementation. This role will build partnerships with U.S. universities, technology incubators, and start-up companies in addition to driving multimedia architecture design of new hardware platform solutions. Responsibilities also include development of a long-range multimedia roadmap focused on innovative camera algorithms and definition of future ISP requirements.

**DUTIES AND RESPONSIBILITIES: Essential Functions**

- Research and identify next generation Computational Imaging technologies in North America that can be applied to Smartphones and VR/AR devices.
- Create innovative algorithms and recommend innovative HW configurations to take advantage of multi-camera systems to achieve best-in-class image quality.
- Deliver expertise in real-time image and video processing systems.
- Pinpoint new algorithm innovations by building and maintaining long-term relationships with technology incubators, start-ups, and vendors.

- Conduct in-depth evaluations and prototypes of emerging Computational Imaging solutions for integration with future mobile devices.
- Build a multi-year roadmap for Computational Imaging technologies.
- Initiate and manage university research and cooperation projects in North America.
- Present monthly updates on multimedia technologies to company executives.
- Collaborate extensively with internal groups across Huawei Device.

#### JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)

##### Education:

Minimum: Bachelor's Degree

Preferred: Master's Degree

Major/Discipline: Computer Science or related field

##### Relevant Work Experience

Minimum: 8+ years of experience in imaging algorithms technology for mobile devices and consumer electronics.

Preferred: 12+ years of experience in imaging algorithms for mobile devices and consumer electronics.

##### Skills & Abilities: (Technical or General)

###### Minimum Requirements:

- Experience in development of image and video processing algorithms for photographic applications (such as optimizing 3As: Auto-exposure, Auto-white balance, Auto-focus, Video Stabilization, Object/Motion-Tracking, noise reduction filters, video compression).
- Experience with multi-camera systems, multi-Image fusion algorithms, hyper-spectral imaging, HDR video technologies, and lightfield imaging.
- Experience with key building blocks such as imaging algorithms, ISP/DSP/GPU pipelines, image sensors, and optics with solid knowledge ranging from SW to HW.
- Strong understanding of image science and image quality concepts.
- Strong development skills in Android, C++, MATLAB, Halide, and mobile processors/ISPs.
- Availability for international and domestic travel for visits to development sites and customer locations.

###### Preferred:

- Experience with object-tracking, machine learning, Artificial Intelligence (A.I.), and Image Understanding.
- Strong understanding of photography.

### **Senior Staff/Principal Engineer, Computer Vision / Depth Sensing**

**Location: San Diego, CA**

#### GENERAL SUMMARY:

The Senior Staff/Principal Engineer, Computer Vision / Depth Sensing will lead the research and development of next generation multimedia solutions for high volume smartphones, tablets, phablets, mobile broadband solutions, and wearable devices. The position is anticipated to produce high visibility impact affecting multimedia strategy, hardware design, and technology implementation. This role will build partnerships with U.S. universities, technology incubators, and start-up companies in addition to driving multimedia architecture design of new

hardware platform solutions. Responsibilities also include development of a long-range multimedia roadmap focused on Computer Vision & 3D Capture system.

**DUTIES AND RESPONSIBILITIES: Essential Functions**

- Research and identify next generation Computer Vision technologies in North America.
- Provide expertise in depth sensing, 3D scanning, and motion-tracking systems.
- Recognize and leverage depth sensing innovations by building and maintaining long-term relationships with technology incubators, start-ups, and vendors.
- Conduct in-depth evaluations and prototypes of emerging depth sensing solutions for integration with future mobile devices.
- Build a multi-year roadmap for 3D capture technologies.
- Identify technology trends and consumer preferences influencing the future of the mobile device industry using real-life use cases.
- Spearhead 3D sensing architecture design of new platform solutions for future smartphones and wearables.
- Define multimedia system-level requirements and functional specifications crucial to guiding R&D teams during development phases.
- Initiate and manage university research and cooperation projects in North America.
- Present monthly updates on multimedia technologies to senior executives.
- Collaborate extensively with internal groups across Huawei Device.

**JOB SPECIFICATIONS (Education, Knowledge, Skills, and Abilities)**

**Education:**

Minimum: Bachelor's Degree

Preferred: Master's Degree

Major/Discipline: Electrical Engineering or Computer Science

**Relevant Work Experience**

Minimum: 5+ years of experience in computer vision / depth sensing technology related to development of mobile devices and consumer electronics.

Preferred: 7+ years of experience in computer vision technology related to development of mobile devices and consumer electronics.

**Skills & Abilities: (Technical or General)**

**Minimum Requirements:**

- Expertise and experience designing depth sensing camera systems, e.g. Time-of-Flight, Structured Light, Active Stereo, etc.
- Experience in depth map generation, camera calibration, 3D reconstruction methods, and related algorithms development for 3D scanning systems.
- Solid knowledge from SW to HW with experience across key building blocks: computer vision algorithms, image sensors, IR/lasers light sources, and optics.
- Strong background in image and/or video processing application development.
- Strong understanding of computer vision concepts.
- Availability for international and domestic travel required for visits to development sites and customer locations.

Preferred:

- Experience with the full system stack from raw depth map processing up to 3D model rendering, including full solution from capture to use-case ready.
- Experience with SLAM and sensor fusion.