ICL at ITRI specialize in three major technological areas: communications, information technology, and data science. We warmly welcome you to join us!

If you are interested in any of the positions listed below, please prepare your resume (please specify the job title you are applying for) and send to meichen@itri.org.tw

| Job Title | Job Description | Qualifications |
|--|--|---|
| ITRI_ICL_AI Robotics R&D Engineer(F102) | 1. Conduct data collection, preprocessing, analysis, feature engineering, Al development, and deploy Al application services. 2. Utilize machine learning, generative Al, and data analytics technologies to design Al models for specific applications (e.g., robotics, healthcare, cybersecurity, energy, etc.) using unstructured data (e.g., videos, images, log data, human behavior, network traffic packets, etc.). 3. Optimize and integrate distributed training and large-scale Al model optimization tools and frameworks (e.g., Horovod, FairScale, DeepSpeed, etc.). 4. Collaborate with cross-functional teams to understand business requirements and propose solutions. | 1. Master's degree or above in Computer Science, Electrical Engineering, or related fields. 2. Strong foundation in probability, statistics, and data analysis; Al development experience or coursework in artificial intelligence, generative Al, deep learning, machine learning, parallel programming, search algorithms, or robotics is preferred. 3. Proficiency in Linux operating systems and Al development languages such as Python `PyTorch. 4. A background in mechanical or electrical control engineering is a plus. |
| ITRI-ICL_5G/6G Software Engineer (K302) | Participate in the development of 5G/6G integrated sensing and communication technologies. Job responsibilities include: 1. Design of sensing algorithms, including Al-based and traditional sensing algorithm development. 2. Integration of sensing and communication systems. 3. Development of 5G/6G communication and sensing integrated application systems. 4. Software-Defined Radio (SDR) and USRP Development" | 1. Bachelor's degree or higher in Telecommunications, Communications, Electrical Engineering, or related fields. 2. Familiar with one or more of the following programming languages: Python, Go, C, C++, or Matlab. 3. Experience in software-related project development. 4. Familiar with communication principles or experience in communication system development, integration, and verification is a plus. 5. Experience in Al/ML system development, integration, and verification is a plus. 6. Familiar with integrated sensing and communication (ISAC) is a plus 7. Familiar with Software-Defined Radio (SDR) is a plus |
| | Develop Al imaging technology for smart robots and robotic dogs, participating in one or more of the following technology developments: 1. VLM (Vision-Language Model) navigation and LBM (Large Behavior Model) integration. 2. End-to-end vision-based 3D environmental perception. 3. Real-time image tracking and terrain analysis. 4. Multi-robot collaboration, formation control, and swarm intelligence. 5. Validation using the Omniverse simulation platform. 6. Integration and development of physical robots and robotic dogs. | Master's degree or higher in Computer Science, Electrical Engineering, or related fields. Proficient in core concepts of machine learning and deep learning, including supervised learning, unsupervised learning, and reinforcement learning. Familiar with deep learning frameworks (TensorFlow, PyTorch) and models such as Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN), and Generative Adversarial Networks (GAN). Experienced in computer vision algorithms, including object detection, object tracking, and image segmentation. Proficient in Python and C++, capable of developing efficient algorithm prototypes and application code. Familiar with software development workflows, including containerization (Docker) and version control (Git). Preferred Qualifications: Experience or research background in generative Al algorithms such as VLM, LBM, or LLM. Hands-on experience in robotic motion planning or reinforcement learning. Familiarity with reinforcement learning techniques and their applications in robotic navigation, such as Deep Q-Learning and Policy Gradient algorithms. |
| ITRI_ICL_3D Simulation Research Engineer(W2) | Develop 3D Gaussian Splatting (3DGS) scene modeling and understanding technologies, focusing on creating high-fidelity and high-precision virtual replicas of physical environments. Integrate 3DGS and polygonal mesh models into physics simulation engines, building virtual training environments for robotics. Collaborate with internal teams and external research groups on topics such as 3D geometric modeling, animation simulation, and generative AI models. | 1.Master's or higher in Computer Science, Mathematics, or related fields. Strong teamwork, communication, and independent problem-solving skills. 2.Proficient in 3D computer graphics theory. Skilled in OpenGL or Vulkan programming, with experience in shader programming. 3.Experience with physics simulation engines like Omniverse, Unreal Engine, or Unity. 4.Experience in 3DGS or NeRF radiance field modeling technologies is a plus. |