Driving decarbonization and digitalization. Together.

Internship – LLM Flow for IC Design Debug

Job description

To build up knowledge databases (Knowledge Graph, SQL, vector database) from internal documents and codes in order to build and design an advanced retrieval augmented generation (RAG) flow, with some orchestration platform (Dify, LangGraph or others). Technology involved: Unix, Python, Dify.ai, LangChain/Llama index, SQL, NetworkX / Neo4j

In your new role you will:

- Build up **knowledge databases** from existing documents and codes
- Get **coached on internal tools** (Infineon UNIX and cloud infrastructure) as well as necessary open-source tools
- Learn about Infineon **IC design flow (Camino)** and relevant IC design steps
- Discuss with multiple design experts to **understand the challenges of IC design steps**
- **Propose and build solutions** (PoC) for those challenges with LLM

Internship learning outcomes:

- Industrial **IC design flow** and some design tasks in details
- Exposure to **Enterprise UNIX** and **cloud infrastructure**
- **Learn and build products** with common open-source tools in generative
- **Prompt engineering** for working with LLM
- Experience with **building an advanced agentic RAG flow** (document processing, vector embedding, coding with LangChain /llama-index, LLM evaluation …)
- **DevOps experience** if solution is deployed to internal cloud

Profile

You are best equipped for this task if you are/have:

- Studying in Computer science / Computer Engineering/ EEE with AIML experience /specialization
- Computing skills: **Unix, Python, Databases and AIML exposure**
- Self initiative and independent
- **Interested to know about the IC design industry** about and willing to learn the flow; and use self knowledge to complete the project with meaningful outcome

At a glance

Location:	
Job ID:	HRC0899908
Start date:	Jan 06, 2025
Entry level:	**0-1 year**
Type:	**Full time**
Contract:	**Temporary**

Apply to this position online by following the URL and entering the Job ID in our job search. Alternatively, you can also scan the QR code with your smartphone:

Job ID: **HRC0899908**
www.infineon.com/jobs

Benefits

- **Singapore:** Wide range of training offers & planning of career development; International assignments; Different career paths: Project Management, Technical Ladder, Management & Individual Contributor; Staggered working hours for normal shift employees ; Home office options, certain conditions apply.; Part-time work possible (applicable for normal shift employees); On-site day-care center; Medical coverage; On-site social counselling and works doctor; Health promotion programs; On-site canteen; Private insurance offers; Paid sick leave according to law, personal accident & work injury insurance, long term illness leave; Retirement benefits, re-employment opportunities, employment assistance payment; Performance bonus; Provision of long haul transport for shift and shuttle services for office to defray transport costs

Why Us

#WeAreIn for driving decarbonization and digitalization.
As a global leader in semiconductor solutions in power systems and IoT, Infineon enables game-changing solutions for green and efficient energy, clean and safe mobility, as well as smart and secure IoT. Together, we drive innovation and customer success, while caring for our people and empowering them to reach ambitious goals. Be a part of making life easier, safer and greener.
Are you in?

We are on a journey to create the best Infineon for everyone.
This means we embrace diversity and inclusion and welcome everyone for who they are. At Infineon, we offer a working environment characterized by trust, openness, respect and tolerance and are committed to give all applicants and employees equal opportunities. We base our recruiting decisions on the applicant´s experience and skills.
Please let your recruiter know if they need to pay special attention to something in order to enable your participation in the interview process.
Click here for more information about Diversity & Inclusion at Infineon.