National Institute of Electronics & Information Technology (NIELIT) Aurangabad(Ch.Sambhaji Nagar) Maharashtra

NIELIT Internship-2024 under MeitY-C2S R&D Project NOTIFICATION

NIELIT Aurangabad invites application towards the NIELIT Internship-2024 under Chip to startup program(C2S) of Ministry of Electronics & Information Technology(MeitY), Government of India from passionate and dynamic students from various institutes across India. This programme is created in such a way that the student will gain substantial knowledge, in the opted field, within a specific duration. Each student under this internship has to complete the Sub Project assigned under MeitY-C2S R&D Project within the specified time duration along with publications in SCI/Scopus indexed Research Journals/papers. In the course of their internship at NIELIT Aurangabad, the intern has the chance to carry out novel research and contribute to development initiatives under the supervision of research-oriented mentors, in order to enhance their research experience and exposure to the research and innovative world. The NIELIT Internship Program offers a transformative experience for students, empowering them with the skills, knowledge, and confidence to thrive in today's technology-driven world. By bridging the gap between academia and industry, this program prepares interns for successful careers and contributes to the growth and innovation of the technology sector.

Key Areas of Internship:-

- **VLSI Design.**
- **SoC(System on Chip) Design.**
- **FPGA Architecture & Programming.**
- **Embedded Systems & IoT.**

Eligibility:-

Undergraduate – B.Tech./B.E./B.Sc./BCA etc. undergoing/Completed.

or

Postgraduate – M.Tech./M.E./M.Sc./MCA etc. undergoing/Completed.

Internship Registration Fees:-Nil

Duration:-

Duration of Internship:

- 6 months for students of B.Tech./B.E./B.Sc./BCA etc. undergoing/Completed.
- 1 Year for students of M.Tech./M.E./M.Sc./MCA etc. undergoing/Completed.

Details of projects for B.Tech/M.Tech students with plan of execution & timelines:-

Sr. No.	Project title	Category of Student (B.Tech/M.Tech)	Plans for execution	Timelines
1.	Design of an AXI Bridge for Edge AI Processor.	M.Tech	Software model compilation	1 Year
2.	An Edge AI SoC based healthcare IoT system prototype.	M.Tech	Software model compilation	1 Year
3.	Development of FPGA Emulation platform	M.Tech	Hardware Design	1 Year
4.	FPGA Emulation of SoC Architecture.	M.Tech	Hardware Design	1 Year
5.	FPGA implementation of DMA controller.	M.Tech	Hardware Design	1 Year
6.	Design and Verification of USB 2.0 Interface Protocol for Edge AI Processor.	M.Tech	Hardware Design	1 Year
7.	Design and Verification of Ethernet IP for Edge AI Processor	M.Tech	Software model compilation	1 Year
8.	Design and Verification of Peripheral Component Interconnect Express (PCIe) 3.0 for Edge AI Processor	M.Tech	Software model compilation	1 Year
9.	Design and Verification of CAN Bus Protocol for Edge AI Processor	M.Tech	Software model compilation	1 Year
10.	Design and implementation of MAC for DNN	B.Tech	Software model compilation	6 months
11.	Design and implementation of Block Memory for IOT applications	B.Tech	Software model compilation	6 months
12.	Design and implementation of DMA Controller and Memory Controller	B.Tech	Software model compilation	6 months

13.	Design and implementation of Clock and Power management unit	B.Tech	Software model compilation	6 months
14.	HW/SW Co-design Approaches for low power edge AI processor	B.Tech	Hardware Design	6 months
15.	An edge AI SoC based IoT system prototype for healthcare monitoring applications	B.Tech	Hardware Design	6 months
16.	Development and integration of communication peripherals with edge AI processor	B.Tech	Hardware Design	6 months
17.	Design of low precision arithmetic for AI Coprocessor	B.Tech	Hardware Design	6 months
18.	Verification of low precision arithmetic for AI Coprocessor using Universal Verification Methodology.	B.Tech	Design Verification	6 months

How to apply:-Interested Students can fill the application form as given below:

a) Online application form can be filled from via Google form Link given below

https://docs.google.com/forms/d/1tlE1h1A4Sr8R6XJSpVmgPtTWco9OOF9jiZ28tpKPUPQ/viewform?edit_requested=true

b) Self-attested Scanned copy of updated CV/Resume.
c) Self-attested Scanned copy of Bonafide Certificate and NoC from the Institute where the student has undergone/is undergoing the current course, in the prescribed format.
d) Self-attested Scanned copy of Valid Government issued ID proof.

Certificates:-
E-certificate is issued only to the Interns on successful completion of the allocated project along with publications in SCI/Scopus indexed Research Journals/papers and upon submission of the Internship Report to their Mentors.

Important Dates:-

Last Date to Apply online:-**31.08.2024**
Commencement of Internship: **03-09-2024.**

Contact:-
Phone: 0240-2982021 Extn-241/126 E-mail: nielitinternshipC2S@gmail.com
Mobile No-+91-9999026637, +91-7386929670