

Vedanth Padmaraman

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[GitHub](#) | [Codeberg](#) | [LinkedIn](#)

Bengaluru, India

Experience

[ongoing] **Intern/Project Associate**
[Centre for Networked Intelligence, IISc](#)

Jun 2025 - Present

- Explored **multi-device parallelism** with **shared memory** on Intel's **Lunar Lake** platform
- Designed and implemented a technique for **computation splitting** across CPU and GPU
- Applied computation splitting technique to parts of a **transformer model**
- Conducted **performance profiling** and analysis of the system

Intern
[Von Neumann AI](#)

Jun - Jul 2024

- Developed and implemented C-Lisp, an **S-expression-based IR language** for **GPU programming**
- Demonstrated compilation and execution of a matrix multiplication kernel on an NVIDIA GPU, using C-Lisp for host and device code
- Presented at the [Innovations in Compiler Technology, 2024](#).
See the video [here](#) and the full paper [here](#)
- Project repository: <https://github.com/chsasank/llama.lisp/>

E-Yantra Robotics Competition (Cosmo Logistic theme)

Sep 2023 - Mar 2024

- Led a two-member team and reached the semi-finals, holding a **national rank of 7**
- Programmed robots for **warehouse management** using **ROS2**
- Implemented a **docking solution** for a mobile robot using a **real-time 2-D LiDAR** scan
- Also involved controlling a robotic arm using **MoveIt** and navigation using **Nav2**
- Project repository: https://github.com/GlowingScrewdriver/eYRC-2023_Cosmo_Logistic-cl2703

Member, core technical team
IEEE Computer Society, PES University Student Chapter

Dec 2022 - May 2026

- Conducted workshops and hackathons for students
- Mentored students on summer projects

Academic strengths

- Data structures and algorithms
- Compiler design • automata and formal language theory
- Digital system design • computer architecture
- Heterogenous parallel programming

Technical Skills

High-performance computing: Parallel programming (SYCL, CUDA, OpenMP), profiling (VTune, Linux Perf)

ML frameworks: PyTorch, HuggingFace Transformers, OpenVINO, Farama Gymnasium

Software engineering tools: Version control (Git), Build systems

Programming languages: C/C++, Python3, Rust, Shell script, Lua, JavaScript

Others: GNU/Linux systems, LLVM, ROS2

Education

**Bachelor of Technology, Computer Science
and Engineering**

PES University, Bengaluru

Aug 2022 - May 2026

Beyond Computers and Engineering

I am an amateur Carnatic Classical vocalist and aspiring stage performer. I also enjoy endurance sports, especially running, cycling and swimming.