

Arnav Kapoor

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To the Mentorship Program Committee,

I am writing to express my enthusiastic interest in the Linux Kernel Mentorship Program. I discovered this program through the Linux Foundation website and through recommendations from my peers in the open-source community. The opportunity to work closely with experienced kernel developers and contribute to a project as impactful as the Linux kernel deeply aligns with my technical aspirations and personal growth goals.

Currently, I am a sophomore at IISER Bhopal pursuing a B.S. in Engineering Science, where I have developed a strong foundation in software development, machine learning, and cloud-native systems. I have honed my skills in backend engineering, Kubernetes orchestration, AI research, and DevOps through both academic coursework and active open-source contributions. My experience includes:

- Contributing to **Meshery (Layer5)**, where I spearhead Kubernetes-native ResourceGraphDefinitions integration, working extensively with Golang, Kubernetes APIs, and D3.js to enhance orchestration and visualization capabilities.
- Developing convolutional neural networks and autoencoders for computer vision research with the University of Guadalajara.
- Conducting equity research and building data-driven financial models at A. Stotz Investment Research.
- Leading projects involving robotics navigation, reinforcement learning, and time series forecasting, using tools like ROS2, NVIDIA Isaac Sim, and PyTorch.

These experiences have equipped me with a robust understanding of system-level programming, open-source collaboration, and complex problem-solving.

Through this mentorship, I aim to deepen my knowledge of Linux kernel internals, master the upstream contribution process, and improve my coding and debugging skills in a production-level environment. I am eager to learn best practices directly from mentors and contribute meaningful code to the Linux community.

Thank you for considering my application. I look forward to the opportunity to learn, grow, and contribute through this mentorship.

Sincerely,

Arnav Kapoor