# UbuCon Asia 2025

**Saturday, August 30, 2025 - Sunday, August 31, 2025**

**St. Xavier's College**
# Program

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# Saturday, August 30, 2025

**Registration** (Aug 30, 2025, 8:00 AM - 9:00 AM)

**Opening remarks** - 0. Main hall (9:00 AM - 9:30 AM)

**Confidential Computing Demystified: An in-depth look into CVMs** - 0. Main hall (9:30 AM - 10:20 AM)

    - Presenter: KURIAKOSE, Dimple (Canonical)

Whenever you run your application on a cloud, you are pretty much giving the cloud provider complete access to your sensitive data. Even if you were to use full-disk encryption to protect the data on your disk, it still remains vulnerable when in use — when loaded into RAM or processed by the CPU. So how do you ensure that your data remains secure even if the cloud infrastructure is compromised? How do you trust a VM that was launched by a compromised host environment? An environment where a malicious actor could have physical access to your allocated hardware. Confidential computing aims to solve all of these problems and in this talk, we'll see how that is achieved. We'll explore potential threats and understand mitigation techniques — techniques like secure boot, measured boot, TPM-based full-disk encryption and hardware-based trusted execution environments. We'll see how Ubuntu is modified to support all of this.

**Empowering Ubuntu Linux for Super Computing, Education, and Disaster Risk Management in Nepal** - 0. Main hall (10:30 AM - 11:00 AM)

    - Presenter: GHIMIRE, Aatiz (Tribhuvan University)

This session highlights how Ubuntu Linux is effectively used at Tribhuvan University (TU) and Nepal's Department of Hydrology and Meteorology (DHM) for high-performance computing (HPC), scientific research, education, and disaster risk management. It will cover real-world deployment experiences, challenges in installing scientific software on Ubuntu, HPC training needs, and practical examples of applications such as Artificial Intelligence, climate modeling, CFD, molecular dynamics, and bioinformatics. Additionally, statistical insights from a university-wide survey on Ubuntu/Linux usage, software preferences, and community engagement among TU students will be presented.

**From ~60 minutes to ~5 minutes: Accelerating Launchpad Setup with LXD, LXD-Image-Builder and Cloud-Init** - 1. Second hall (10:30 AM - 11:00 AM)

    - Presenter: Mr GUPTA, Tushar

Have you ever wondered where the packages for multiple architectures on Ubuntu are built, where the primary archives are maintained and published, or where PPAs are hosted? If you've ever searched or filed a bug for Ubuntu, you may already know the answer—Launchpad. Launchpad is a set of web services that help software developers collaborate. Setting up Launchpad used to be a long, error-prone process, taking about 60 minutes with many manual steps, which made it difficult for the community to fix annoying bugs or propose new features. In this talk, I'll demonstrate how we reduced the setup time to around 5 minutes using LXD, LXD-Image-Builder, cloud-Init, and LXD profiles. By pre-caching dependencies and automating the setup, the process is now faster, reliable, and makes it easier to contribute back. Join me to learn how these tools can simplify your workflow!

**Crafting snaps quickstart guide 101** - 2. DVINE (Workshops) (10:30 AM - 12:00 PM)

    - Presenters: Mr GHOSH, Soumyadeep (Snapcrafters/Ubuntu/Ubuntu Membership Board/Ubuntu Flutter Community); KAMPPETER, Till (OpenPrinting/Canonical)

In this workshop, we'll showcase, how to create a snap from scratch. We'll use real life examples, with known issues and problems users run into. We'll also try to showcase how to integrate ffmpeg and webkitgtk into your snaps, how to detect which plugs to use and more. This workshop will start with a guided quickstart tutorial, after which we have an interactive problem solving session where we help you build a snap for your favorite application. https://github.com/snapcrafters/snap-quickstart-workshop

**Intelligent Document Workflows: Bringing Local AI into ONLYOFFICE on Ubuntu** - 0. Main hall (11:00 AM - 11:30 AM)

    - Presenter: SAWANT, Eeshaan

In this talk, we'll explore how to transform ONLYOFFICE Desktop Editors on Ubuntu into a privacy-first AI assistant by integrating a local language model (e.g., LocalAI or GPT4All). We'll cover: 1. Why Local AI Matters · The benefits of running inference on-device: data privacy, offline capability, and reduced latency. 2. ONLYOFFICE Desktop Editors + DocSpace 3. Setup & Integration · Installing and configuring LocalAI on Ubuntu. · Installing the ONLYOFFICE AI plugin and connecting it to the local model via REST. 4. Live Demonstration · Summarizing a long report in one click. · Generating translations with contextual accuracy. · Refining and reformatting text via conversational prompts within the editor. 5. Best Practices & Extensions · Tips for model fine-tuning and resource management on Ubuntu. · How to extend the same approach to spreadsheets and presentations.

**Lunch break** (11:30 AM - 1:30 PM)

## Your first homelab: A friendly guide to LXD - 2. DVINE (Workshops) (1:30 PM - 3:00 PM)

**- Presenters: VELASCO, Andreia; GASPARI, Mauro (Canonical)**
**Introduction** Motivation, context, and demo of what a homelab built with LXD looks like. **Setup and installation** - How to set up your operating system for hosting a homelab - How (and why!) to install LXD from the snap store and perform initial configuration steps - How to set up the web-based graphical interface **Instances** - Explanation of app containers, system containers, and VMs (with practical examples) - Spin up a container on LXD - Spin up a VM on LXD **Profiles** - Brief explanation - Tour of the default profile and how to edit it so desktop VMs work **Next steps and additional resources** (time-dependent) - Backups, snapshots - Basic networking - Projects - Set up a container with Adguard to filter your internet traffic at home.

## SIEM automation using Wazuh and Ansible for ubuntu - 0. Main hall (1:30 PM - 2:00 PM)

**- Presenters: POUDEL, Dipesh; PRASAI, Sushant**
# Introduction to Wazuh and Ansible - i. Overview of Wazuh as an open-source SIEM tool - ii. Role of Ansible in security automation # Understanding Wazuh Alerts - i. How Wazuh detects security events - ii. Types of alerts generated in an Ubuntu environment # Automating Patch Management with Ansible - i. Writing Ansible playbooks for alert remediation - ii. Automating security patching based on Wazuh alerts # Implementation and Examples - i. Deploying Wazuh core components in 9 Ubuntu VMs - ii. alerts based on Global NST databases built into the Wazuh manager - iii. Understanding alert levels and rule IDs in Wazuh - iv. Utilizing built-in decoders in Wazuh core for alert processing - v. Configuring Ansible for automated response - vi. Example scenarios of security vulnerabilities and their automated remediation # Best Practices and Considerations - i. Ensuring reliability and security in automation - ii. Optimizing Wazuh and Ansible for large-scale deployments # Q&A and Discussion - Open floor for audience questions

## Ubuntu Kylin for AIPC: Development and Implementation - 0. Main hall (2:00 PM - 2:30 PM)

**- Presenters: Mr LI, Jianfeng (KylinSoft); Dr YU, Jie (National University of Defense Technology)**
Ubuntu Kylin is an official Ubuntu derivative, recognized for its UKUI desktop environment and Kylin application suite, both of which are embraced by global enthusiasts and community users. With over one million users in China, Ubuntu Kylin is actively exploring the integration of AI with operating systems. This presentation will introduce Ubuntu Kylin's latest explorations in AI and OS integration, focusing on the development of an AI-native operating system foundation and a standardized AI capability access platform. These innovations enable deep coupling between the desktop system and AI services, leading to the successful integration of intelligent assistants, AI-generated text-to-image features, smart fuzzy search, and more. By leveraging on-device large model technology, we optimize software-hardware collaboration, allowing end users to execute complex AI tasks without relying on cloud computing. This fundamentally transforms the OS user experience, reshaping how users interact with AI at the system level.

## Ubuntu LoCo Council & LoCo Leaders BoF - 1. Second hall (2:00 PM - 3:00 PM)

**- Presenter: HAN, Youngbin (Ubuntu Korea Community)**
This BoF session aims to introduce the Ubuntu LoCo Council and what they do to help building Ubuntu Local Communities across the world. And also gather and connect people who leads Ubuntu Local community in their region across the world. It will be basically 2 part: One with some intro to LoCo Council and Q&A, The other part will be some open discussion between LoCo leaders and other folks who would be interested to join LoCo.

## Scaniverse Universal Scanner Drivers: One Solution for Every Distro - 0. Main hall (2:30 PM - 3:00 PM)

**- Presenter: KAPOOR, Akarshan (Indian Institute of Technology, Mandi, India)**
**Project Description** The ScaniVerse project is a pioneering initiative designed to streamline the installation and management of scanner drivers across different Linux distributions. By utilizing Snaps, the project enables the creation of distribution-independent packages, allowing scanner drivers to be easily installed on any system that supports snapd. Additionally, scanner applications can be containerized using OCI containers, facilitating their deployment on immutable operating systems. Key components of the project include the integration of scanner support into the PAPPL library, originally developed for printer applications. This integration supports multi-function devices and provides a unified driver format for both printers and scanners. The project also focuses on retrofitting legacy scanners to ensure continued support for older hardware.

## Coffee break (3:00 PM - 3:30 PM)

## AppArmor in Action: Building Application Profile - 2. DVINE (Workshops) (3:30 PM - 5:00 PM)

**- Presenter: SUBEDI, Shishir**
Ubuntu is a collection of many software programs that function together. Sometimes, these applications may have more permissions than they actually need, which can make them a good target for attackers. For example, imagine you install a simple image viewer, but because of it's weak security settings, it can read your private documents, access the internet, or even modify

system files. If an attacker was able to find a vulnerability in such an application, they could possibly use that to compromise the whole system. Without proper restrictions, an application could accidentally or maliciously perform actions beyond what it should. AppArmor helps fix this by allowing us to define exactly what an application can and cannot do. In this workshop, we will: - Learn the basics of AppArmor and how it works. - Understand how to check an application's current permissions. - Write a basic AppArmor profile to restrict an application's access. - Test the profile to see how it improves security. - Learn how to troubleshoot and refine AppArmor profiles. By the end of the workshop, we will be able to create AppArmor profiles that enhance the security of applications running on our system. An AppArmor profile creates a shield around our application. It defines what files, network resources, and system capabilities the application can access. For example, if we define the following rule for the image viewer, it can only access the files that end with `jpeg`, `jpg` or `png` which significantly reduces the attack surface. ``` file r /**.{jpeg,jpg,png} ```

## Growing Ubuntu and FOSS Community - and yourself, Locally and Globally - 1. Second hall (3:30 PM - 4:00 PM)

**- Presenters: ARORA, Ansh (FOSS United); Mr KAUSHIK, Aryan (Ubuntu India); Ms KARKI, Rashika; KAMPPETER, Till (OpenPrinting/Canonical); NEUPANE, Upendra Prasad**
We invite community leaders across the world as panels who leads Ubuntu LoCos, Local FOSS communities and organization and also people who learned and grows through Ubunut and FOSS Community.

## Deep Dive into Ubuntu Monitoring with eBPF and Prometheus - 0. Main hall (3:30 PM - 4:00 PM)

**- Presenter: Mr GARTIA, Neeraj**
Monitoring is something every sysadmin or developer must consider, particularly when dealing with Linux-based systems such as Ubuntu. But most classic monitoring tools either don't provide enough information, or they slow down because they execute heavy agents or scripts. In this presentation, I'll demonstrate how we can do it differently by leveraging two strong tools: eBPF and Prometheus. eBPF (extended Berkeley Packet Filter) is a capability integrated into current Linux kernels that allows us to execute little programs securely within the kernel itself. That way, we can observe what's going on way down in the system, stuff like system calls, network activity, and CPU consumption, without altering the apps in use or introducing a ton of overhead. It's fast, secure, and incredibly useful for observability. Prometheus, however, is already a very popular open-source tool for monitoring and alerting. It collects metrics from different places and assists us in analyzing them through PromQL, its query language. Putting eBPF and Prometheus together, you get a very effective and granular method of monitoring your Ubuntu system, with real-time data and little performance overhead. In this session, I'll take you through the process of how eBPF gathers metrics and how Prometheus is able to leverage those metrics to provide you with information about your system. We'll cover existing eBPF exporters, and I'll demonstrate how to get everything installed on an Ubuntu machine—from installing Prometheus to running an eBPF exporter. There will also be a live demonstration, where we'll track things such as CPU utilization, memory, disk I/O, and network performance in real time. I'll write some PromQL queries, so the audience can see just how easy it is to go exploring and see what your system is doing. I'll conclude by examining what's new in Prometheus, such as new features that further empower it for system monitoring. I'll discuss how these enhancements, when paired with eBPF, can better monitor Ubuntu machines and provide greater flexibility in monitoring system activity.

## Hands-On on Translating in Ubuntu - 1. Second hall (4:00 PM - 4:30 PM)

**- Presenter: MD KHUSAINI, Muhammad Syazwan (Ubuntu Malaysia)**
This session will show hands-on on how to do translation on both submission and review via Launchpad and also will showcase the Launchpad feature in general and also show new translation on Flutter.

## RISC-V Innovation with Ubuntu Integration - 0. Main hall (4:00 PM - 4:30 PM)

**- Presenter: LIANG, Yuning**
DeepComputing is driving innovation by combining RISC-V technology with the power of Ubuntu. Following a strategic partnership with Canonical last year, Ubuntu 24.04 now officially supports the DC-ROMA Laptop II, making it one of the first RISC-V platforms with robust Ubuntu integration. Building on this success, all future DeepComputing products will support Ubuntu, including our latest release, the AI PC. This integration provides developers with a familiar, optimized environment to build and scale applications on RISC-V architecture, unlocking new possibilities for AI, edge computing, and beyond. The collaboration between RISC-V and Ubuntu represents a breakthrough in open hardware and software ecosystems. RISC-V's flexibility and open standard, combined with Ubuntu's reliability and global reach, empower businesses, developers, and researchers to innovate faster and more effectively. DeepComputing is committed to advancing RISC-V and Ubuntu adoption, ensuring our products deliver cutting-edge performance while maintaining open and collaborative principles. 2025 is the year of AI, DeepComputing introduced its latest world most powerful RISC-V AI PC mainboard for Framework 13" laptop. Working with Ubuntu and its application on AI is the key focus for the coming years.

## Lightning Talk: Lightning Talk Session (Aug 30, 2025, 4:30 PM - 5:00 PM)

### [41] Linux Kernel Contribution and Backporting into Ubuntu (4:30 PM, 5 minutes)

*Presenter: KHADKA, Dipendra*
All about Linux Kernel Contribution (Insight on the flow, community and my journey). Then, back-porting upstream changes into Ubuntu. 1. Quick overview: What is the Linux Kernel and why it matters. 2. Kernel Contribution Workflow(Identifying the problems, static and dynamic analyzer tools, Follow coding style (checkpatch), Use get_maintainer.pl to find whom to CC, Send patch using git send-email, Feedback loop and Eventually, it gets ACKed and merged by a maintainer). 3. Community & Culture (Clear review process, Subsystem maintainers are helpful ,Mailing list is slow, but precise, Challenges: Patches can be ignored (timing, formatting, etc.).Feedback is blunt, not personal. Need thick skin and patience, etc). 4. My Journey ( How I first contributed into the Linux Kernel). 5. Backporting into Ubuntu(Identify upstream patch, Cherry-pick into Ubuntu kernel tree,Resolve conflicts,Test extensively, follow standard and submit). 6. Q&A

## [46] Compliance Made Easy (4:35 PM, 5 minutes)

*Presenter: Mr DHAKAL, Aadarsha (Start Small Pvt. Ltd.)*
Title: Compliance Made Easy Sub Title: 5 Minutes to Secure Your Infrastructure Author: Aadarsha Dhakal --- # Pain Point - Maintaining compliance across a growing infrastructure is complex and time-consuming. - New regulations and updates require constant adaptation. - Relying on manual checks is error-prone and inefficient. *Ubuntu Pro provides built-in compliance automation tools.* # Why Ubuntu Pro? * **Enhanced Security Maintenance:** Extended Security Maintenance (ESM) for 10 years. * **Comprehensive Coverage:** Security patches for the Ubuntu base OS and thousands of applications. * **Compliance Tools:** Built-in tools for automating compliance checks. * **Kernel Livepatch:** Apply critical kernel patches without rebooting. * **FIPS 140-2, CIS, and DISA-STIG:** Certified modules and tools for various compliance standards. # Demo Let's start by enabling the Ubuntu Security Guid(USG) service ``` sudo pro enable usg sudo apt install usg ``` Ubuntu Security Guide (USG) – a tool based on OpenSCAP – to automate the compliance and hardning process ## Check compliance against standards ``` sudo usg audit cis_level2_server ``` ## Fix the non-compliant issues ``` sudo usg fix sudo reboot ``` ## Check compliance against standards ``` sudo usg audit cis_level2_server ``` # Conclusion * **Reduced Manual Effort:** Automate compliance checks and remediation. * **Improved Security Posture:** Proactively identify and address vulnerabilities. * **Simplified Audits:** Generate detailed compliance reports. * **Cost-Effective:** Consolidate security and compliance management. * **Ubuntu Pro:** Your partner in achieving and maintaining compliance. "Compliance is like doing the dishes. Nobody wants to do it, but when you don't, it piles up." # Thank You!

## [82] AI Applications on the World's First RISC-V 50 TOPS Local AI Compute (4:40 PM, 5 minutes)

(TBD - DeepComputing sponsored lightning talk)

**Day 1 Closing remarks - 0. Main hall (5:00 PM - 5:30 PM)**

# Sunday, August 31, 2025

**Registration** (Aug 31, 2025, 8:00 AM - 9:00 AM)

**From Scratch to Summit: Leading a Grassroots Open Source Movement in South Asia** - 0. Main hall (9:00 AM - 9:50 AM)

- **Presenters: Mr SINGH, Aaditya (GNOME); SINGH, Sailesh**
In this session, I ( Aaditya Singh ), the founder of GNOME Nepal and lead organizer of UbuCon Asia 2025, and Sailesh Singh,the co-lead of Ubuntu Nepal, will share lessons learned from building and sustaining open source communities in underrepresented regions. From reviving Ubuntu Nepal after 13 years to growing GNOME Nepal to 300+ active contributors, this talk will explore practical leadership strategies, sustainable community models, cultural challenges, and the power of mentorship and collaboration. Attendees will gain actionable insights into: Starting and scaling an open source community from scratch Motivating contributors with limited resources Fostering diversity and engagement in local ecosystems Bidding for and organizing international open source events Whether you're an open source veteran or just starting your own community, this session will be helpful foundation for you and will equip you to lead with purpose.

**GhVmCtl: Test your GUI apps directly from CI runners** - 1. Second hall (10:00 AM - 10:30 AM)

- **Presenter: Mr GHOSH, Soumyadeep (Snapcrafters/Ubuntu/Ubuntu Membership Board/Ubuntu Flutter Community)**
GhVMCtl is a tool written in bash, which uses lxd to test GUI apps inside a runner. It uses KVM and spawns an lxd container inside the github runner. Inside that lxd container, one can easily run various different types of commands including running a snap, taking screenshots of them in window mode or screen mode using gnome-screenshot, which is a handy utility by gnome. There is also an example CI that is used by Snapcrafters currently for testing purposes. This tool can easily help big teams maintain large number of GUI apps with ease.

**Empowering Local AI Innovation: Hands-On Exploration of Open-Source LLMs on Ubuntu** - 2. DVINE (Workshops) (10:00 AM - 11:30 AM)

- **Presenter: Mr KAMARUDZZAMAN, Khairul Aizat (Ubuntu Membership Board)**
Ubuntu's versatility as a platform for AI development is often underutilized, especially in local environments. This session will guide participants through setting up and experimenting with leading open-source LLMs (e.g., LLaMa 3.3, DeepSeek-R1, Qwen2.5-Max) on Ubuntu systems. We'll explore practical use cases, from code generation to multilingual applications, while addressing hardware constraints and optimizing workflows for developers and enthusiasts in Asia. Attendees will gain actionable insights into integrating these tools into Ubuntu-based projects, fostering innovation in their communities **Content Summaries:** 1. Introduction to Open-Source LLMs 2. Setting Up LLMs Locally on LXD (Ollama & Open WebUI) 3. Hands-On Workshop: Building Applications using VScode and LLM 4. Ethical and Community Considerations **Key Takeaways** - Practical skills to deploy and customize LLMs on Ubuntu (locally). - Strategies to overcome hardware limitations in resource-constrained environments. - Networking opportunities with Ubuntu's AI/ML and localization communities in Asia

**The map of your AI career** - 0. Main hall (10:00 AM - 10:30 AM)

- **Presenter: MUNTEANU, Andreea (Canonical)**
AI is everywhere nowadays and everyone is looking at how to upskill in this area. In 2023, there were more than 200 thousand jobs related to machine learning and data science on Glassdoor, suggesting the market needs that exist in this space. Yet, whereas exciting, building a career in this space is overwhelming. There are many paths to follow and opportunities out there, but there is little guidance on how to choose between them. The differences between data scientists, data engineers and machine learning engineers are still vague. This challenges young talent to choose their AI careers, leading often to choices that are not informed but rather by chance. This talk will present AI roles that people can follow. It will highlight the key considerations, necessary skills and long term vision for different careers in the industry. The presentation will include pointers to take infrared decisions for the future role, as well as growth opportunities that are available to everyone. Building a career is difficult, and in a space as dynamic as AI, it is even more intimidating. Together, we can help you build your own AI career map, so it gets easier to get the job you want.

**Ubuntu on AWS: Designing Secure, Agile, and Scalable Cloud Architectures for Modern Workloads** - 1. Second hall (10:30 AM - 11:00 AM)

- **Presenter: DHOBI, Desh Deepak**
Ubuntu is the most widely used operating system in the cloud and powers a majority of workloads on AWS. This session will provide guidance on architecting the next generation of cloud workloads on AWS using Ubuntu, focusing on security, scalability, efficiency, operational excellence, reliability, and sustainability. **Topics Covered in the Session:** 1) Getting Started with Ubuntu on AWS (EC2, Open-Source Ubuntu, Ubuntu Pro, Ubuntu Confidential OS. 2) Ubuntu Infra on AWS for AI/ML workload management. 3) Security & Compliance (FIPS, CIS hardening, Ubuntu Pro Live Patching, AWS Patch Manager) 4) High Availability & Scalability (Auto Scaling, Load Balancing, EKS, ECS) 5) Containerization & Orchestration (Docker, Kubernetes, MicroK8s on AWS) 6) DEVOPS, CI/CD & Automation (Terraform, Ansible, AWS CodePipeline, CloudFormation, cloud-init) 7) Logging & Monitoring (Prometheus, Grafana, AWS CloudWatch) 8) Cost Optimization techniques when it comes to using Ubuntu

on AWS. 9) Best Practices & Real-World Use Cases of making the most when using Ubuntu on AWS. **Attendees will explore:** 1) Why is Ubuntu the go-to OS for AWS cloud environments? 2) How to deploy, secure, optimize , and manage your Ubuntu instances on AWS? 3) How are different flavours of Ubuntu made available on AWS in an easy-to-use way? 4) What are the best practices for containerization, automation, and DevOps on Ubuntu AWS environments? 5) How to use AWS-native services together with Ubuntu for high availability, Security, and scalability? The session will equip attendees with a better understanding of provisioning a secure, production-grade, modern cloud infrastructure using Ubuntu on AWS.

## Linux Security with eBPF on Ubuntu - 0. Main hall (10:30 AM - 11:00 AM)

- **Presenter: SREENIVAS, Vutukuri (Stackup)**
In terms of offering thorough visibility and effective threat mitigation, typical security systems frequently fall short. Without changing kernel code, the Extended Berkeley Packet Filter (eBPF) is a potent technology that makes it possible to monitor kernel-level activity safely and effectively. This session examines how runtime protection, network security enforcement, and real-time observability offered by eBPF might improve security on Ubuntu systems. Measures like intrusion detection systems, antivirus software, and static firewalls are less efficient against contemporary attacks as a result of the sophistication of security threats. By offering a programmable method of real-time system behavior analysis without compromising kernel stability, eBPF tackles these issues. eBPF is a crucial tool for contemporary security observability and enforcement since it can examine system calls, network packets, and process events by executing sandboxed programs inside the Linux kernel. The talk will focus on the integration of eBPF with Ubuntu, **highlighting** Ubuntu's compatibility and ecosystem support for eBPF-based security applications. also include practical demonstrations of eBPF-based security tools on Ubuntu, showcasing how to use eBPF programs for monitoring system calls, filtering network traffic, and detecting suspicious activities. We will walk through real-world examples of deploying eBPF security tools such as Falco, Cilium, and **BPFtrace**, and demonstrate how they enhance security in Ubuntu environments. Participants will have a thorough grasp of how to use eBPF to improve security in Ubuntu environments by the end of this session. They will acquire hands-on experience in deploying eBPF for anomaly detection, network protection, and security monitoring, allowing them to leverage this potent technology in their own security plans.

## Lunch break (11:00 AM - 12:30 PM)

## About Logpoint & AppArmor for the Real World Application - 0. Main hall (12:30 PM - 12:45 PM)

- **Presenters: GYAWALI, Manish (Logpoint); PANTHA, Suresh (Logpoint)**
Explore how Logpoint helps enhance security with real-time log management and monitoring solutions. Learn how AppArmor can be leveraged in real-world applications to fortify your Ubuntu environment. Dive deep into practical security insights for protecting your systems from evolving threats.

## Open Documentation Academy Live: Make your first open source contribution - 2. DVINE (Workshops) (12:30 PM - 2:00 PM)

- **Presenter: MORRISON, Graham (Canonical)**
## About the Open Documentation Academy Canonical's [Open Documentation Academy](https://canonical-coda.readthedocs-hosted.com/en/latest/) is a collaboration between Canonical's documentation team and open source newcomers, experts, and those in-between, to help us all improve documentation, become better writers, and better open source contributors. A key aim of the project is to set the standard for inclusive and welcoming collaboration while providing real value for both the contributors and the projects involved in the programme. ## The workshop This workshop will lead attendees through the complete process of making their first open source contribution; identifying an issue in a [participating open source project](https://canonical-coda.readthedocs-hosted.com/en/latest/projects/), setting up a local work environment, solving the issue, proposing the solution for review and ultimately getting the solution merged into the upstream project. This will be done with real documentation issues on a real open source project, with the genuine outcome of having solutions merged into the documentation. Contributors will receive recognition for their contributions and the projects themselves benefit from improved documentation and oversight. ## Prerequisites This session is suitable for complete beginners to open source, Ubuntu and Linux, and anyone yet to make their first open source contributions. Attendees will need: * some command line experience will help * a GitHub account to have [signed the CLA](https://ubuntu.com/legal/contributors/agreement) * access to an Ubuntu laptop with *git* installed ## The format Suggested duration is 90 minutes. **Tutorial** - Introduction to the Open Documentation Academy - Introduction to Diátaxis - Overview of the process **Group preparation** - Split into groups, or working individually - Each group selects and requests a task to work on - Set up a local build or work environment for that task - Identify a solution or an approach **Action** - Edit or write to fit the accepted approach - Propose the solution to the project - Update according to feedback - Propose and merge the updated solution ### Outcomes * **Recognition**: Each group will have made a recognised contribution to an open source project. * **Real-world experience**: Attendees will have learnt how to work with, and contribute to, an open source project, including navigating issues, feedback and the git workflow. * **Improved documentation**: Several open source projects will have had their documentation improved. We will also have set an example of what friendly, inclusive, diverse, and productive open source collaboration should look like.

**Talk: Nepal Engineering College (Aug 31, 2025, 12:45 PM - 1:00 PM)**

## Next UbuCon Asia in your city...? - 1. Second hall (1:00 PM - 2:00 PM)

**- Presenter: HAN, Youngbin (Ubuntu Korea Community)**
UbuCon Asia happens different city every year. To do so, We accepts bid proposals from teams who would like to host us, review, select then announce the location. Interested to host UbuCon Asia in your city? Or would like to know on which city will UbuCon Asia happen next year? Join this BoF to discuss about the location bidding process and some rough event hosting ideas from potential local teams! Note that this BoF isn't for deciding the next hosting city, rather it's for exploring some possibilities for future editions.

## Self hosting with Ubuntu: Break free from the shackles of corpos. - 0. Main hall (1:00 PM - 1:30 PM)

**- Presenter: CHATURVEDI, Venkatesh**
This will be a talk about how to create a home lab/server using completely FOSS. I will be talking about the basics of self hosting and how Ubuntu server and the different FOSS tools help with self hosting. This will include but will not be limited to basics of hypervisors using proxmox and explaining why Ubuntu server is an ideal choice for the OS. I can also cover the choice of using Proxmox over other popular hypervisor solutions like VirtualBox or standalone KVM. I will also be showcasing some cool self-hostable FOSS alternatives to popular proprietary services. I'll also be covering some networking basics if time permits. I will be getting into the basics of server hardening for security and also how to actually setup a server without a GUI. This specificallyr relates to the advantages of using Ubuntu server as it is designed specifically for headless operation. Feel free to reach out to me for any additional details or context.

## PostgreSQL Snap/Charm/Juju on RISC-V - 0. Main hall (1:30 PM - 2:00 PM)

**- Presenter: Mr LUTAY, Alex (Canonical)**
Demonstrate PostgreSQL Apt/Snap/Charm/Juju on RISC-V Using Ubuntu 24.04. Show UI/UX similarity on AMD/ARM/RISC-V (kudos to Ubuntu). Show simplicity of managing apps using Juju.

## Coffee break (2:00 PM - 3:00 PM)

## How to build a sustainable Open Source company - 0. Main hall (3:00 PM - 3:30 PM)

**- Presenter: KARLITSCHEK, Frank (Nextcloud)**
Open Source companies are important to fund, develop and promote Open Source Software. But building and running a sustainable Open source company can be tricky. For example navigating different business models and the AI revolution is challenging. This talks gives an overview how Nextcloud developed from a fork of the previous company and Open Source project in 2016 to the leading Open Source collaboration platform. Nextcloud is today bootstrapped, fully independent, sustainable and grows over 50% year over year organically. All this while having an 100% Open Source business model, an open community oriented development process and decentralized team with employees in 24 countries. This talk covers all the challenges and solutions regarding the pick of the right business model, hiring, marketing and sales strategy, …

## How to manage Ubuntu systems in air-gapped environments - 2. DVINE (Workshops) (3:00 PM - 4:30 PM)

**- Presenter: GAIRE, Pravesh (Canonical)**
Enterprises running systems in air-gapped environments face unique challenges: no internet access, security and compliance requirements, the need for reliable updates and system management. Its a tough job for sysadmins to manage things on a large scale. Enter Landscape, which provides security patching, auditing, compliance tasks, multi tier repository mirrors and other features. Landscape is free to use on up to 5 machines and has different plans (SaaS/Managed/self-hosted) available for enterprise use cases. It comes included in an Ubuntu Pro subscription. After completing this workshop, you will gain an understanding of how to manage machines in air-gapped environments and make use of Landscape features like repository mirrors and package management. Moreover, you will also get to know how Ubuntu archives work and how to manage VMs using Multipass when we deploy self-hosted landscape. Related documents: [pro][1] [multipass][2] [Landscape][3] [landscape quick-deployment][4] [manage-repositories][5] [1]: https://ubuntu.com/pro [2]: https://canonical.com/multipass [3]: https://ubuntu.com/landscape [4]: https://ubuntu.com/landscape/docs/quickstart-deployment [5]: https://ubuntu.com/landscape/docs/manage-repositories-with-the-API

## Running Spark on top of K8s with Charmed Apache Spark - 0. Main hall (3:30 PM - 4:00 PM)

**- Presenter: Mr DHAKAL, Bikalpa (Software Engineer @ Canonical)**
In this talk we will see how Apache Spark can be run on top of Kubernetes, and how Canonical's Charmed Apache Spark solution makes this process easier by leveraging the capabilities of Juju to run and manage application workloads in Kubernetes. We'll see how Spark jobs can be run using the `spark-client` snap and leverage Charmed Apache Kyuubi for managed SQL workloads. Additionally, we'll cover Spark History Server for job tracking and observability using the Canonical Observability Stack (COS). Through real-world use cases, attendees will see how all of these tools are consolidated together in the Charmed Apache Spark

bundle and how these tools streamline and optimize big data processing.

## Ubuntu on RISC-V: Performance, Power and Potential - 1. Second hall (3:30 PM - 4:00 PM)

**- Presenter: GHIMIRE, Sangam (Kathmandu University)**
Instruction Set Architecture (ISA) forms the foundational blueprint of all computing systems. Historically, ISAs have been tightly coupled with specific manufacturers, leading to inconsistencies across platforms and requiring the redevelopment of software infrastructures for each architecture. Although some level of standardization has been achieved through dominant architectures such as x86 (led by Intel and AMD) and ARM, these remain proprietary and closed systems. This restricts openness, transparency, and collaborative progress—core principles of the open-source ecosystem. In contrast, RISC-V has emerged as a transformative, open, and modular ISA that empowers developers, researchers, and hardware designers by eliminating licensing costs and vendor lock-in. This presentation explores the performance and compatibility of RISC-V when paired with Ubuntu, the flagship open-source operating system. Key metrics such as **Boot Times, CPU Utilization across different RISC-V cores, Kernel Compilation Times, and Throughput in system-level tasks** will be examined, along with comparisons to other mainstream architectures. The session will highlight **the performance and power efficiency** of Ubuntu running on RISC-V hardware over other mainstream hardware, showcasing its viability in real-world applications. From ultra-low-power IoT devices to scalable edge computing platforms, Ubuntu on RISC-V demonstrates significant potential for enabling innovation across diverse industries. This talk will trace the evolution of ISA development, examine Ubuntu's expanding support for the RISC-V ecosystem, and discuss the practical implications for developers and organizations adopting this architecture—supported by comparative benchmark data and real-world performance metrics.

## Day 2 Closing remarks - 0. Main hall (4:30 PM - 5:00 PM)