

# LAYER5

*Expect more from your infrastructure*

## Hacktoberfest Prep: Easing into Cloud Native Open Source Projects



LAYER5



HACK  
TOBER  
FEST

# Hacktoberfest Prep



## **Gaurav Chadha - Layer5 Overview** (5 min)

- Welcome and introduction to Layer5's community
- Our history with Hacktoberfest
- This year's theme includes the Meshery Docker Extension

## **Sahil Suman - Navigating your first issue** (10 min)

- My story

## **Nikhil Ladha - The Mechanics of Contributing** (20 min)

- Overview of layer5.io site structure and the framework used.
- Demo a fix in layer5.io which includes:
  - Code semantics
  - Site build
  - Commit sign-off
  - Lint checks

## **Harshit Dandryl - Finding and Landing Your Issue Assignment** (5 min)

- Using GitHub labels effectively; Searching across GitHub Orgs
- Polluting poking a well-intentioned issue squatter
- Suggesting your own issues

## **Ashish Tiwari - Get "GO"ing with Meshery** (5 min)

- Quick overview of Meshery architecture
- Navigating through Meshery's source code
- How and where to contribute first for gophers?

## **Abhi Kumar - Your Cloud Native Catalog** (5 min)

- Meshery Catalog - Designs, Applications, Filters

## **Anita Ihuman - Joining the Layer5 Community** (5 min)

- How to join the community
- New members form
- Accessing resources

## **Alexis Abakasanga - Contributing impactfully as a Designer** (5 min)

- Layer5's Design File
- Contribution Guidelines

## **Gaurav Chadha - Conclusion**

- Jump in!

...with guest Contributors

Pranav Singh and Kamal Singh



# Gaurav Chadha

Software Engineer Intern and Meshmate at  
**LAYER5**

[layer5.io/community/members/gaurav-chadha](https://layer5.io/community/members/gaurav-chadha)



# Get Started with Layer5



Docker Extension for Meshery



Newcomer  
Onboarding  
Program



Open Source  
programs



GSOD



LFX



MLH



GSOC



She Code Africa

# Sahil Suman

Software Engineer Intern at **LAYER5**

[layer5.io/community/members/sahil-suman/](https://layer5.io/community/members/sahil-suman/)



# Navigating your first issue



*From zero to contributing*

- First time contributing to open-source? How to start?
  - *What type of issues shall I take up?* 🤔
- Confused where to add the fix?
  - *How to navigate through a large codebase* 😞
- Take some time, settle-in 🧐
  - *Understand the code, the "why's" and "how's"*
- Kaboom!
  - *You are through!* 🚀



# Nikhil Ladha

Software Engineer at  Red Hat  
Maintainer and Meshmate at **LAYER5**

[layer5.io/community/members/nikhil-ladha](https://layer5.io/community/members/nikhil-ladha)



# The Mechanics of Contributing

*layer5.io site structure and frameworks*



## Code Semantics

- *Understand which component to use and when.*

*Reuse.*

- *Consistency = quality.*
- *Consistency = faster PR merge times.*

## 👁️ Build and Preview

- *Await your deploy preview and review changes.*



## Give your John Hancock.

- *Commit your changes (with sign-off, i.e, DCO)*



## Buckle up. Preflight check.

- *Review and fix any failing build checks like eslint checks, while you **patiently** await another contributor or maintainer to offer feedback.*



## Grammar counts.

- *Craft a meaningful PR title and push with your changes inside.*



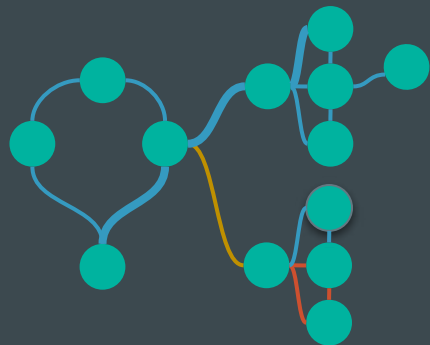
# Harshit Dandriyal

Software Engineer Intern at **LAYERS**

[layer5.io/community/members/harshit-dandriyal](https://layer5.io/community/members/harshit-dandriyal)



# Not Finding a Code-based Issue to Work On?



1. Run the project by following the documentation, then you can start finding issues on your own.
2. No-code contribution by finding an issue to make the project better or you can also assign that issue to yourself by asking from maintainers.
3. You can still create a blog, work on the design, edit project documents, and welcome new participants.

# Abhi Kumar

Software Engineer and Maintainer at

**LAYER5**

[layer5.io/community/members/abhishek-kumar](https://layer5.io/community/members/abhishek-kumar)





# Discover best practices. Publish design patterns.

*Meshery Catalog*



Users can share:

- Operational designs
- Network Filters
- Governance Policies
- Mesh Add-ons



Teams can:

- Create private catalogs visible only to your teams and approved by your org.



Advanced users can:

- Build your WASM Filters and eBPF Programs



## WASM Filters

## Service Patterns

## eBPF Programs

## OPA Policies

TRAFFIC MGMT

**Singleton Queue**

WEBASSEMBLY

MESHERY023

SECURITY

**Session Authorizer**

WEBASSEMBLY

MESHERY019

TRAFFIC MGMT

**Circuit Breaker**

MESHERY003

RESILIENCY

**Retries**

MESHERY012

OBSERVABILITY

**L7 Traces**

MESHERY045

SECURITY

**L7 Denial**

MESHERY046

OBSERVABILITY

**Correlate Event**

MESHERY055

SECURITY

**Single Tenant**

MESHERY059

TRAFFIC MGMT

**JWT Transformer**

WEBASSEMBLY

MESHERY034

OBSERVABILITY

**HTTP Metrics**

WEBASSEMBLY

MESHERY028

SECURITY

**Mutual TLS**

MESHERY014

DEPLOYMENT

**Multi-Cluster**

MESHERY013

RESILIENCY

**Retry Deadline**

MESHERY044

DEPLOYMENT

**Node Agent**

MESHERY043

RESILIENCY

**Only w/Agent**

MESHERY057

DEPLOYMENT

**Pre-provision**

MESHERY056

## MeshMap Designer

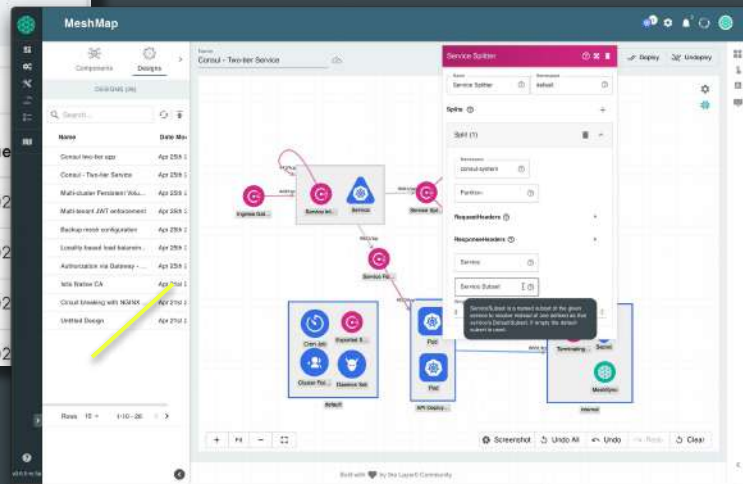
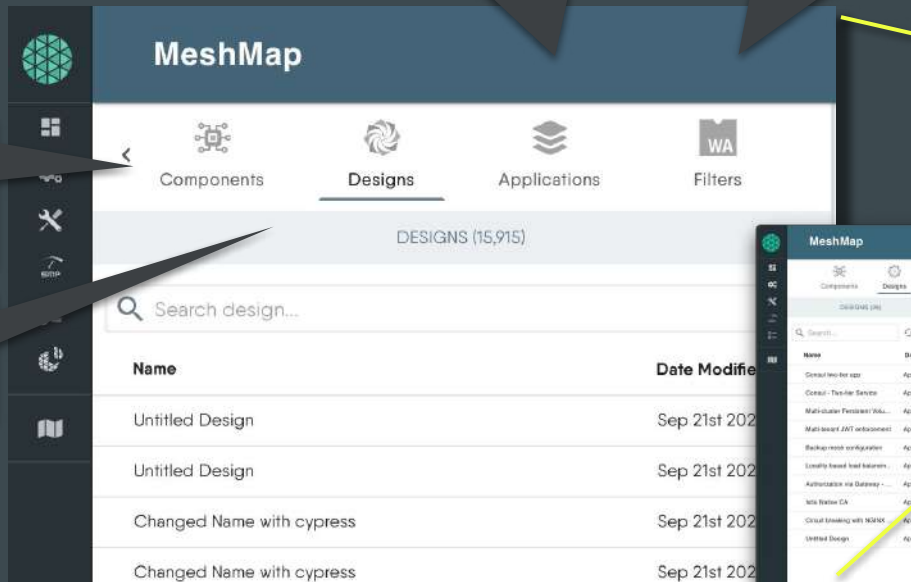


Import Docker Compose apps, Helm Charts, or Kubernetes Manifests for visual configuration

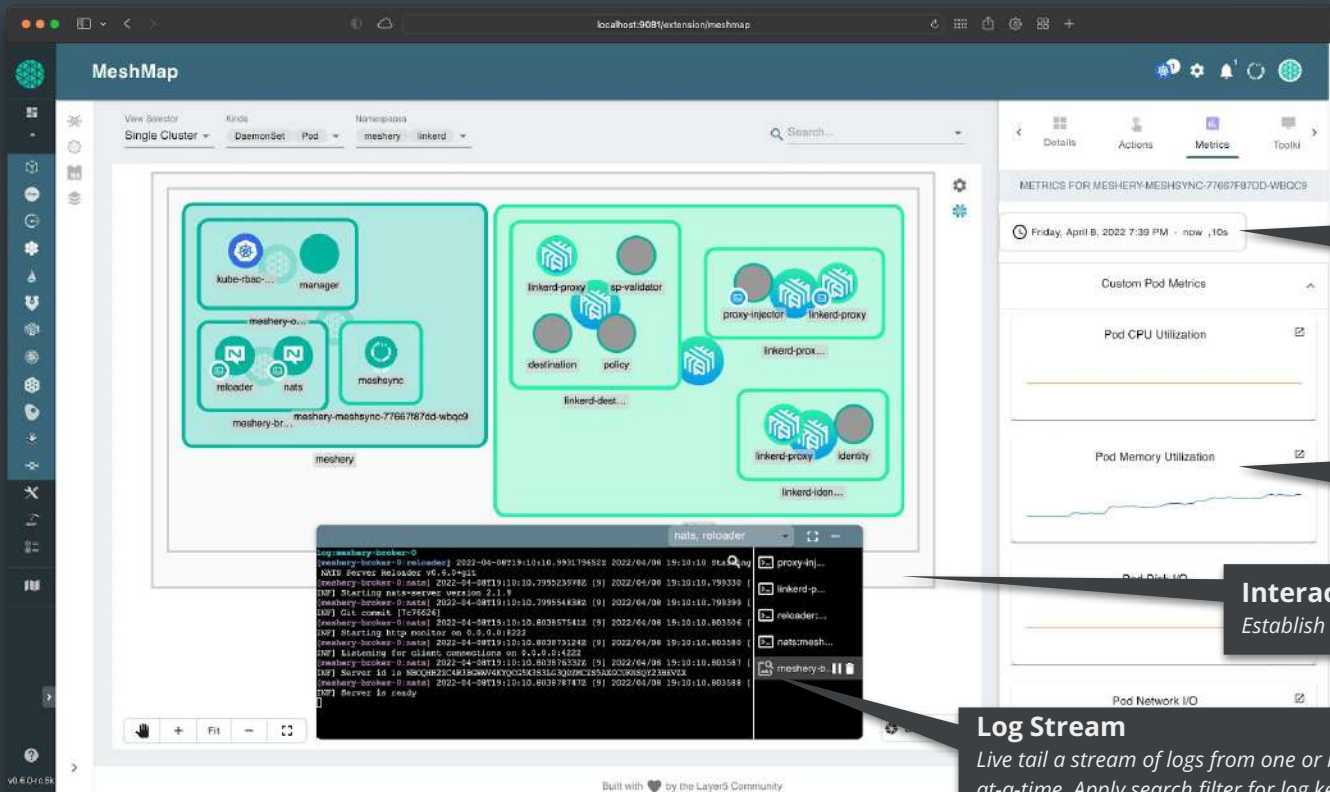
## Import, configure, chain, and deploy your WASM filters

Hundreds of versioned components  
to choose from

*Compose designs. Reuse designs as patterns.*



# MeshMap Visualizer



## Historical Performance Metrics

*Sliding window of past performance*

## Real-time Performance Metrics

## Object-specific metrics and alerts

## Interactive Terminal

*Establish sessions with one or more pods at-a-time*

## Log Stream

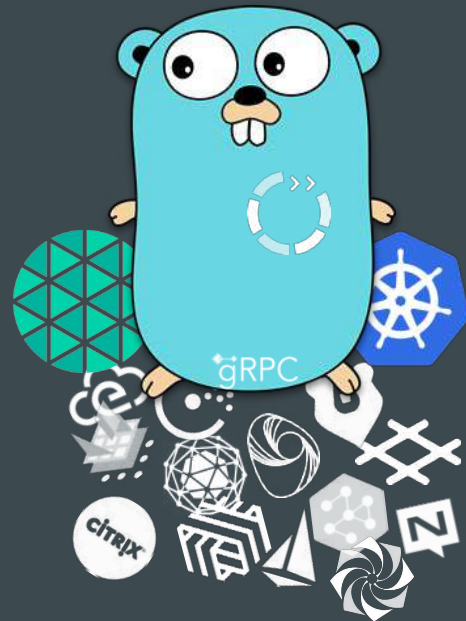
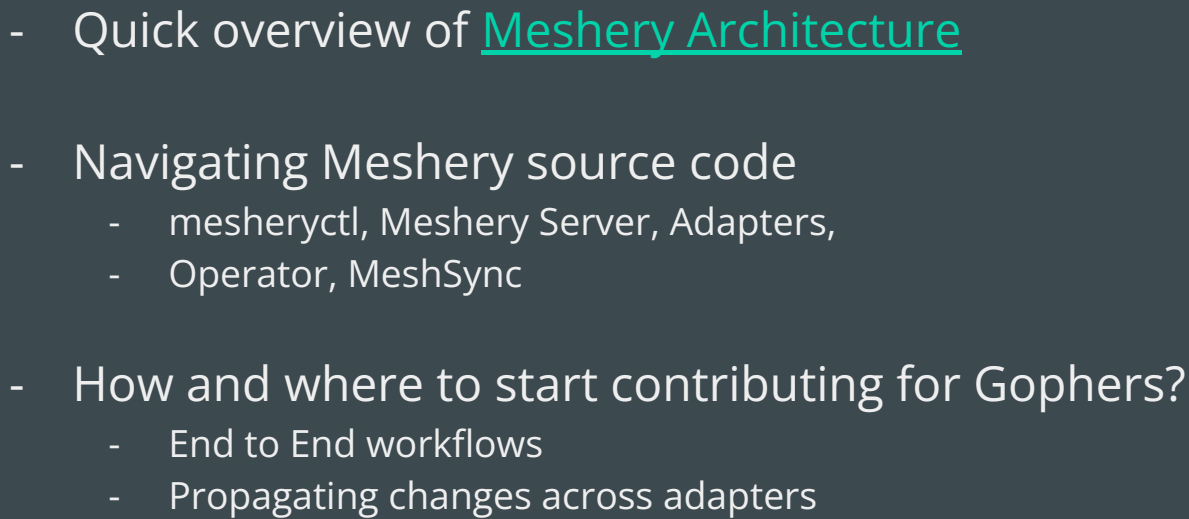
Live tail a stream of logs from one or more pods at-a-time. Apply search filter for log keywords.

# Ashish Tiwari

Software Engineer and Maintainer at  
**LAYER5**

[layer5.io/community/members/ashish-tiwari/](https://layer5.io/community/members/ashish-tiwari/)









Anita  
Ihuman

MeshMate at Layer5

[layer5.io/community/members/anita-ihuman](https://layer5.io/community/members/anita-ihuman)



# Join the Layer5 Community!



## Where do I start?

- Jump into our [slack](#)
- Go over our beginner guides
- Ask a [Meshmate](#) questions

## How do I become a member?

- Community [Members Form](#)
- [Member profiles](#)
- Attend our [meetings](#)

## Where do I find an area to contribute?

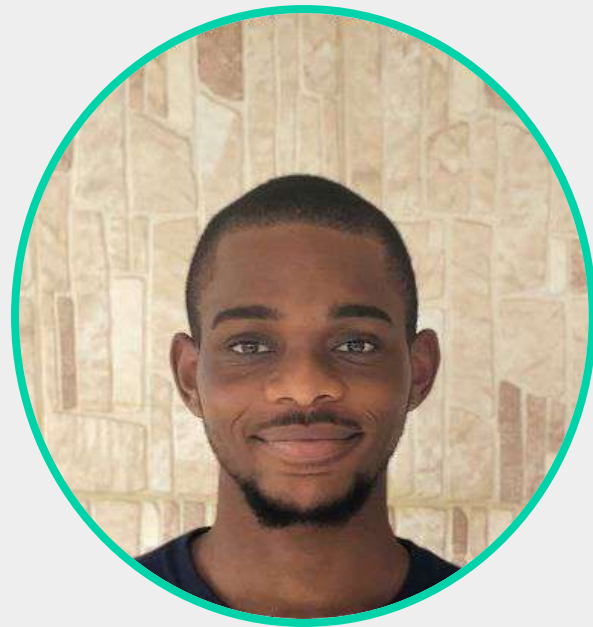


- Explore the [GitHub repositories](#)
- Request an issue
- Create an issue
- Jump on discussions in the forum, slack, & meetings

# Alexis Abakasanga

*UX Designer at Layer5*

[layer5.io/community/members/alexis-abakasanga](https://layer5.io/community/members/alexis-abakasanga)



# Contributing impactfully as a UX Designer



- **Layer5 Figma Design Files**

The home of all Layer5 projects, all hands on deck with design issues are just a comment away.

<https://www.figma.com/file/5ZwEkSjwUPitURD59YHMEN/Layer5-Designs?node-id=1869%3A2967>

- **Contribution Guidelines**

These are important in-order to facilitate and maintain impactful design contributions moving forward.

<https://www.figma.com/file/5ZwEkSjwUPitURD59YHMEN/Layer5-Designs?node-id=5310%3A0>





**#1 Most Popular Project**  
in Linux Foundation Mentorship Program



**Participate!**

It's Hacktoberfest every month at  
Layer5



[github.com/layer5io](https://github.com/layer5io)



[twitter.com/layer5](https://twitter.com/layer5)



[linkedin.com/company/layer5](https://linkedin.com/company/layer5)



[slack.laye5.io](https://slack.laye5.io)



[youtube.com/c/Layer5io](https://youtube.com/c/Layer5io)



[discuss.layer5.io](https://discuss.layer5.io)

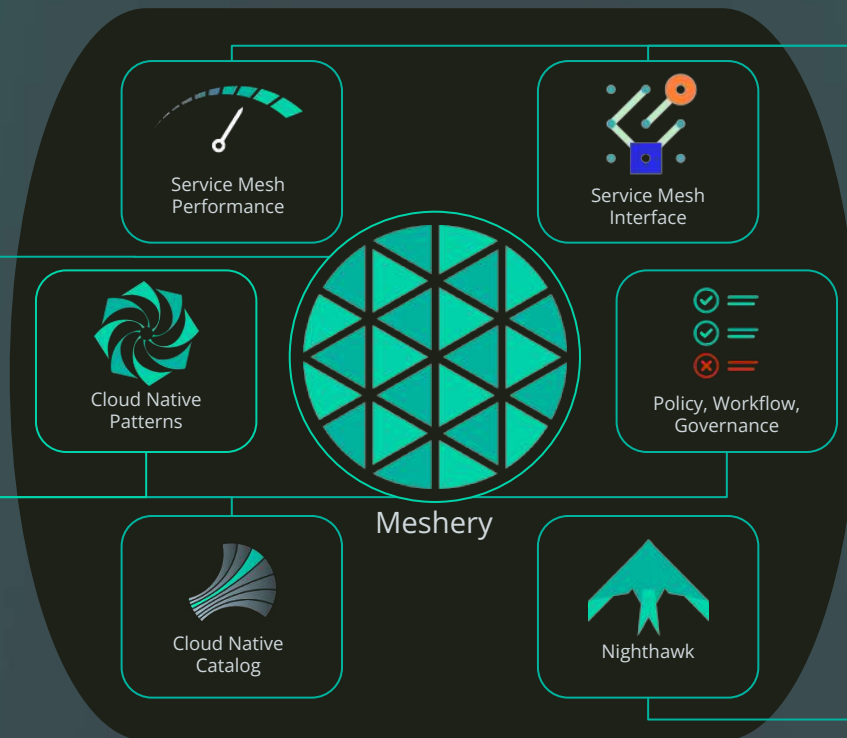
# LAYER5



The Only Openly Governed  
Cloud Native Manager



Best Practice Patterns  
and Templates



Define and Enforce  
Service Mesh Standards



Advanced Performance  
Analysis and Intelligence





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