

# 👨‍🔬 Autoware Labs Task Force- Call for Participation 🧪 #4550

🔒 Closed

xmfcx announced in Announcements



xmfcx on Mar 18

Maintainer

edited ▼

Category

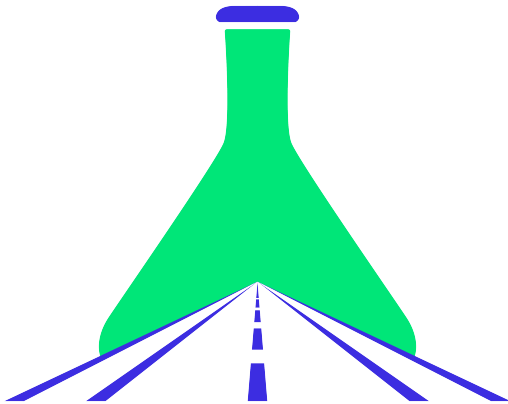
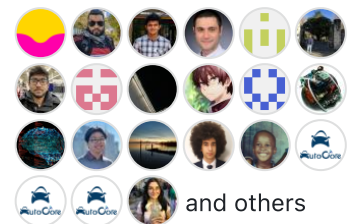


Announcements

Labels

None yet

23 participants



## Autoware Labs



## Call for Participation: Join the Autoware Labs Initiative! 🧪

The Autoware Foundation is thrilled to announce the Autoware Labs initiative, a move towards accelerating the development of autonomous driving software. See the [previous proposal post](#) here.

We invite individuals, whether sponsored by their organizations or through other means, who are willing to commit to the development of Autoware with a clear focus on city driving and the challenges it presents.



### Why Join Autoware Labs?

- **Impact:** Contribute to the cutting edge of autonomous driving technology.
- **Collaboration:** Work alongside with like-minded people around the globe.
- **Learning:** Enhance your skills and knowledge and share your experience.




### How to Participate



If you're excited by the prospect of prototyping autonomous driving software, we want to hear from you!

To participate, please:

- Leave a comment below this post,
- Join our [Autoware Labs Discord Channel](#), or
- Attend the [Software Working Group meetings](#), detailed in our [Autoware Calendar](#).

We' would be happy to converse with you on the Software Working Group meeting calls, it's on every Tuesday, you can find it in the Autoware calendar.


 Keep in mind that every week the meeting time alternates between:

- Tuesday 15:00  16:00 UTC
- Tuesday 07:00  08:00 UTC

Don't forget to check the [Autoware Calendar](#) for the most relevant time for you.

## Timeline

The Autoware Labs project is set to kick off on ~~April 1, 2024~~ -> **April 2, 2024**, with the initial cycle concluding after six months, on **October 4, 2024**.

 To accomodate members on other time zones, we will have a follow up kick-off meeting in **April 9, 2024** as well. *(Please check your calendars to pick the time that fits you)*

## Meet Our Team

Access the [Autoware Labs Team Spreadsheet](#) to get to know our current members.

## We're Looking For:

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- **Developers and Researchers:** Skilled in ROS 2, machine learning, computer vision, robotics, or similar areas.
- **Data Scientists:** Keen on analyzing diverse datasets for perception tasks such as obstacle detection, instance segmentation, and point cloud processing.
- **Software Engineers:** To improve performance, reduce latency, and contribute to new features and packages.
- **Unity Developers:** To enhance the AWSIM simulator with improved hotkey management, UI design, and new test environments.
- **UI/UX Designers:** With a vision to enhance user interfaces, incorporating features from the racing game industry and beyond.

## Autoware Labs Tasks / Goals

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We have planned a number of tasks that we're looking for help with. Feel free to take a look and suggest any other tasks you think would be beneficial to the Autoware community.

⚠️ Please bear in mind that this is a rough list and the tasks will be detailed soon. ⚠️

### Autoware Labs Tasks:

▶ Click to expand   ON!

[Diagrams.net link](#)

These tasks, when detailed, will be tracked through the [Autoware Labs Github Project](#).

↑ 12

👍 9

🎉 13

🚀 7

22 comments · 17 replies

Oldest

Newest

Top



**sezan92** on Mar 19 Collaborator

Hey, **@xmfcx** I am really interested to contribute to Autoware Labs! I have joined the channel #autoware-labs . My experience ,

- Machine learning Engineer and Data scientist
- Also I have working experience with ROS 1 (can easily work on ROS 2)
- 2 years experience in a Mobile Robotics company.

I am not sure how to take tasks . I am interested to start by taking small tasks first! Please let me know.



2



1

4 replies



**idorobotics** on Mar 19 Maintainer

Tasks are posted here:

<https://github.com/orgs/autowarefoundation/projects/21>



2



**xmfcx** on Mar 19 Maintainer Author

The tasks are not well detailed just yet, we are at the stage of gathering developers.

We'll soon update the project board!



**xmfcx** on Mar 19 Maintainer Author

Additionally, I've updated the post above to include a rough timeline.  
**@sezan92** we'd be happy to talk to you at the next Software WG call.



**sezan92** on Mar 19 Collaborator

**@xmfcx** thanks. Due to my job nature it is very hard for me to join software wg calls. Is it okay if you can discuss in discord?



1



**rugved42** on Mar 19

Hello Team, I am a robotics engineer with 4 years of professional experience, I am looking to contribute to the Autoware community.  
Thanks!



2



1



1

2 replies



**xmfcx** on Mar 19 Maintainer Author

Hi **@rugved42**, thanks for reaching out and showing interest in the Autoware community!

We're thrilled to hear from a robotics engineer with your experience. It would be great to have you join us at our next Software Working Group (WG) call to discuss how you can contribute. Could you share which areas you're most interested in? Whether it's sensing, perception, localization, mapping, planning, control, simulation, or UI, we're eager to find a match for your skills and interests. Looking forward to hearing from you!



**rugved42** on Mar 19

Thanks! I'll join the software call today, I'm interested to take projects from Sensing, Localization & Mapping and Perception groups. I have experience with all of the above.



**RoboCrafty** on Mar 20

Hi there!

I would love to contribute too but I am not sure if I have enough experience. I started working with ROS1 extensively during my internship which then continues to my current Final Year Project. I've moved to ROS2 recently and am just starting to get hand of things with it. Would I be able to know if my limited experience allows me to take part?



1 reply



**xmfcx** on Mar 20 Maintainer Author

Hi @CraftyCranberry, thank you for reaching out.

Your work with ROS1 and recent move to ROS2 give you a good foundation to contribute to Autoware Labs. Beginning with simpler refactoring tasks can help you get comfortable with our codebase and workflows.

Also, we encourage you to join our next Software Working Group call and the Autoware Labs Discord channel to connect with the team and learn more.



**melihyazgan** on Mar 20

Hi all,

I am doing my PhD in Collaborative Perception with Intelligent Transportation Systems.

Additionally I have prior working experience of 6 years as a software engineer. I would like to contribute the autoware labs. I might be helpful in perception. I joined the discord. Should I do anything else?

Greetings,  
Melih

↑ 2

1 reply



**xmfcx** on Mar 20 Maintainer Author

Hello Melih, Welcome to Autoware Labs!

Your expertise aligns well with our vision, particularly in the realm of perception. Please join us at the next Software Working Group call, where we can discuss your potential contributions in detail.

Additionally, please review the perception tasks outlined in our call for participation and let us know which ones particularly appeal to you.

Best regards



**nivu** on Mar 20

Hello Everyone, I am a computer vision engineer with 5 years of experience, interested in contributing to the Autoware stack.

↑ 1

1 reply



**xmfcx** on Mar 20 Maintainer Author

Hello @nivu,

Thank you for your interest! Please join the next Software Working Group meeting, which you can find scheduled in the Autoware calendar.

This will be a great opportunity for you to learn more about how you can contribute and for us to understand your specific areas of interest and expertise.

Also, could you examine the list of perception & sensing tasks in the main post above? Let us know which tasks/goals you feel particularly inclined towards.

Looking forward to your participation.



1



**congphase** on Mar 21

edited ▼

Hi all,

I had experience with Autoware.Auto back in 2021-2022 and helped build successful demos of autonomous driving features for my company. This is my [ROS Answers profile](#). I hope my experience in localization and mapping would be helpful for the project.

↑ 1

1 reply



**xmfcx** on Mar 25 Maintainer Author

Hi [@congphase](#),

Great to hear from someone who contributed to Autoware.Auto! We'd love to welcome you back at the next Software Working Group meeting. Looking forward to reconnecting and discussing further.



1



**MetehanGokmen** on Mar 21

Hello everyone,  
I am an engineering student who is passionate about autonomous vehicles. I worked for 2 years in an autonomous car team as a competition. I don't know how good I am but I want to help to grow this project.

↑ 1

3 replies



**xmfcx** on Mar 25 Maintainer Author

edited ▾

[@MetehanGokmen](#), thanks for reaching out!

Your experience with autonomous car competitions will definitely be helpful. Please join the next Software Working Group call to see how you can get involved.

Could you also share which areas you are more interested in? Or any tasks that catch your eye from the list in the post above?



**MetehanGokmen** on Mar 25

edited ▾

[@xmfcx](#) I am interested in localization and perception. I have a question about timezones of meetings. Is the meeting time is our local timezones? The first meeting says it is Tueasday 10am. I am from Turkey. It is 10am for here too or shifted another time?



1



**xmfcx** on Mar 25 Maintainer Author

edited ▾

Yes, tomorrow's meeting is at 10am for GMT+3(TSI).

[https://calendar.google.com/calendar/u/0/embed?src=autoware.org\\_6lol0ho5ft0217h8c60pi1fm30@group.calendar.google.com](https://calendar.google.com/calendar/u/0/embed?src=autoware.org_6lol0ho5ft0217h8c60pi1fm30@group.calendar.google.com)

In this link, if you click the

button on the bottom right side of the page, it will be added to your personal calendar. And everything will be in your personal calendar time zone.



**zehranrgi** on Mar 21

Hi,

I have experience w/ ROS2, and computer vision and am currently working w/ Autoware(0-1 years). My focus is on Traj Pred and Perception. I am Looking for tasks if I can contribute to this community.

↑ 2

1 reply



**xmfcx** on Mar 25 Maintainer Author

Hello [@zehranrgi](#), thanks for sharing your background. We'd love to explore how you can contribute further. Please join the next software working group meeting to discuss your interests in more detail. Looking forward to your participation!



**idorobotics** on Mar 22 Maintainer

[@xmfcx](#) [@mitsudome-r](#) I propose we temporarily change the Software WG Tuesday meeting times to accommodate the volunteers' timezones since most members of the WG will also be participating in Autoware Labs project.

I'll coordinate this once the call for volunteers closes, and we have the complete participants list.

↑ 1

1 reply



**xmfcx** on Mar 22 Maintainer Author

edited ▼

Thank you for your thoughtful suggestion, [@idorobotics](#) . It's worth noting that our current setup includes meetings at alternating times to cater to different time zones. This allows members to choose the meeting time that best fits their schedule.

To ensure clarity and accessibility for everyone interested in the Autoware Labs project, let's update the main 'Call for Participation' post above.

This way, potential volunteers can make an informed decision on which meeting to join.

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Added:



🔔 Keep in mind that the meeting time alternates between:

- Tuesday 15:00 ➡ 16:00 UTC
- Tuesday 07:00 ➡ 08:00 UTC

Don't forget to check the [Autoware Calendar](#) for the most relevant time for you.

to the initial post.



**gulbinkirikoglu** on Mar 25

Hi everyone,  
I'm a control engineering student with a keen interest in artificial intelligence. I've been working on lane and object detection for about two years for an autonomous vehicle competition. I want to contribute to the Autoware stack.

↑ 3

0 replies



**sezan92** on Mar 25 Collaborator

please let me know in this announcement for the next steps . As open source, i am also working on huggingface open source projects, and I have little bit of experience to manage volunteer groups .

↑ 2

0 replies



**dbaksoy** on Mar 25

Hello everyone,  
I am a master's student in engineering interested in preparing scenarios for autonomous vehicles. I also have a fundamental knowledge of machine learning and artificial intelligence. I am looking forward to contributing to the Autoware community.

↑ 3

0 replies



**proxi666** on Mar 27

edited ▼

Hello Everyone

I'm a final year Mechatronics undergraduate with a focus on a research project involving scaled autonomous vehicles., I am really interested to contribute to Autoware Labs! My skills,

- Proficient in ROS and **ROS2** for robotic & Autonomous system integration.
- Experienced with **3D LiDARs** for environmental **perception and Localization**
- Developed, Modified and adapted **SLAM** (Simultaneous Localization and Mapping) algorithm, specifically **FAST-LIO**, along with **LIVOX-MID360 LIDAR**, accurately creating a PCD (plus localization) of my campus
- IBM-certified in **computer vision**, skilled in visual data analysis.
- currently working with **reinforcement learning** to improve autonomous decision-making.

Regards.

↑ 2

0 replies



**dnivcnt-lab** on Mar 27

Hello everybody,

I am an embedded software engineer with experience in the robotics sector. I am currently looking forward to get into the autonomous driving sector.

In the past I had the opportunity to work in some demo made with Autoware.Auto, and later with Autoware.Universe. I would like to start in support tasks, or refactoring tasks focused on localization, planning and control.

Greetings,  
Daniel

↑ 2

0 replies



**SujayAmberkar** on Mar 28

Collaborator

edited ▼

Hi everyone,

I am a Unity 3D developer with 1.5 years of experience. I'm interested in getting into autonomous robotics simulation.

- I've got a little experience in handling sensor data.
- Understanding of ROS2 using the ROS2ForUnity plugin by Robotec AI.
- Apart from Unity, I'm also experienced in React-three-fiber.

I want to contribute to Autoware's stack.

Thanks & regards,  
Sujay

↑ 1

0 replies



**HAR0070** on Mar 29

Hi everyone,  
I am a recent graduate and have worked with ROS1, have decent level of knowledge in path planning, controls, electric motors and motor controller. I am keen to support Autoware's stack but not sure where to start with.

Regards,  
Harshin

↑ 1

0 replies



**cyn-liu** on Apr 1 Maintainer

edited ▼

Hi all,  
I am really interested to contribute to Autoware Labs! Specifically, I'm interested in participating in project [3D object detection – BEVDet](#), but I am not have enough experience. I am familiar with the network structure of BEVDet and have made some improvements based on it before, after training on [nuScenes](#) dataset, there has been some improvement in speed and accuracy. But I have limited experience in model deployment.

My experience ,

- abundant experience with Autoware.Universe
- multiple years of experience in a Autonomous Driving company.

↑ 1

0 replies



**beginningfan** on Apr 2 Collaborator

Hi,everyone,  
I am an enginner from AutoCore. I mainly work on the lidar perception based on autoware, and I am good at pointcloud processing. I can help solve the problem of high cpu usage of autoware.universe.

↑ 1

0 replies



**FahadRazaKhan** on Apr 4

Hi, I have a background of robotics with majoring in trajectory planning and control. I am also familiar with software development for the AVs. I would like to join. Thanks.

↑ 1

0 replies



**ziri4k** on Apr 7

edited ▼

Hi, I am interested in working on this project. I have worked with Tensorflow, ROS2, MATLAB.

I was on ODD working group and have run Autoware on my computer. I am interested in sensing and perception

↑ 1

1 reply



**liuXinGangChina** on Apr 23

Collaborator

Hi, everyone,

I am an L4 AD engineer from AutoCore. I and [my colleague](#) (who is also a localization expert) would like to do some research on making autoware localization available on high way scenario.



**lukewarmtemp** on Apr 26

Hi everyone,

I'm a robotics engineering student currently interning at Red Hat. I have some experience working with ROS and ROS2 in design teams and some course work. Would love to learn and contribute to this community.

↑ 1

0 replies



**bahare-mrt97** 3 days ago

Hi, I am a PhD Control engineering student, recently implemented Autoware on an autonomous 135ton-mining dump truck. Adding sensors, configuring different modules, also a little work with AWSIM LAB. My thesis is also about designing path w.r.t vehicle dynamics. I will be glad to contribute in different parts.

It is worth mentioning that i am familiar with ROS2 and i have added packages to autoware as well.

↑ 1

1 reply



**xmfcx** 3 days ago

Maintainer

Author

Hi [@bahare-mrt97](#) 🙌 welcome to the community!

While the Autoware Labs project has been concluded, we're actively continuing development through the **Software Working Group**. We'd be thrilled to have your input and collaboration there.

We have an open meeting tomorrow.

You may:

- Join our [Autoware Labs Discord Channel](#),
- Attend the [Software Working Group meetings](#), detailed in our [Autoware Calendar](#).

In the calendar link, if you click the



button on the bottom right side of the page, it will be added to your personal calendar. And everything will be in your personal calendar time zone.