



Cross Winter of Code



What is CrossWOC?

CrossWoC is a six-week long opensource event organised by IEEE DTU & IEEE DTU CS, which gives programmers and innovators an opportunity to bring out their nascent talent and find intriguing solutions to real-world problems.

It provides a platform for developers to dig deeper into their gray matter and bring out their latent creativity through open source.



When is CrossWOC?

This is the *first edition* of CrossWoC conducted by IEEE DTU & IEEE DTU CS, and it will be held from 13th February 2021 to 28th March 2021.



What are the incentives to participate in CrossWoC?

Amazing Learning Opportunities

The event is a great learning opportunity for both experienced programmers as well as newbies because it takes deep dive into the world of open-source programming, giving the participants an opportunity to have healthy conversations with their mentors, most of whom are going to be your DTU seniors, and developing a network. You can approach your mentors even after the program ends for brewing new ideas or polishing the ones already established.

Projects

The event gives the participants a platform to hone their skills by putting them to use in open source projects, under the guidance of helpful and experienced mentors.

For the love of Open Source

If you are a coding geek who simply loves to devote time to programming and open source, then this event is made for you!

Exciting Prizes

There are exciting prizes which you can grab by participating in the event and surely much more for the winners.

Goals of the program

The major goals of CrossWoC are:

-> Inspire young developers to get involved in Open Source software development.

- -> Help them to master the development workflow of Git and GitHub.
- -> Connect with the experienced mentors and learn from them.
- -> Prepare for other Open Source programs like Google Summer of Code, Outreachy, Season of KDE, etc.



Am I good enough?

In the past few years, there have been a few first-year students from IEEE DTU who have made their way to GSoC. If they can, this simply rules out myths like first years are not meant for it.

The skills you need to be a part of it are:

Communication Skills

You will have to speak up. You will have to email the project mentor.

You will have to submit your query to IEEE DTU CS in case of any

issue or facing difficulty in understanding anything. As long as you are able to express yourself, there is nothing to stop you from achieving it.

Working Setup

A working laptop/computer with internet throughout the program.



Most of the time, you will be coding and pushing your code online. This requires you to have a computer and a working internet connection with you.

Pro-Tip: Don't be afraid if you don't have a Linux operating system, your mentor is there to help you out!

How to apply?

Joining GitHub

Go to https://github.com and Sign Up. Choose a cool username (commonly referred to as GitHub handle) for

you, and voila! You've met the first requirement of being a part of CrossWoC.

Registering on CrossWoC Website

Go to the website of CrossWoc - http://crosswoc.ieeedtu.in and



find the "Student Registration" button at the centre of the page. Login with GitHub and Fill in your name, your email address and your Institute. Hoorah! You're now in!

What to do next?

Choosing a Project

First of all, you can choose as many projects as you want. It's not about doing everything on just one project, but solving as many issues as you can, contributing as much as you can. Navigate over to https://crosswoc.ieeedtu.in and hunt down projects by their description. All of the projects must be on GitHub. Learn how to get acquainted with GitHub interface, with the help of various online resources, some of which are mentioned on the dashboards.

Making Contact

The contact details of each mentor will be available to you on the projects list. It is simple enough to understand that the details are public for no one other than you. So, you have every right to contact the mentor and ask for help on the project.

Software Development

Develop the project codebase. Write up test suites. Add third party integrations. And lots of other cool stuff depending on your project. After cooking up the perfect recipe, use Git to keep track of the changes and create your Pull Requests on GitHub.

Fix as many issues you can and add as many new features possible in the project. Communicate with your mentor about further requirements and/or improvements.

Writing Documentation

The code that you have added must be documented thoroughly. Open Source is about writing code that humans can read and understand. Without documentation, it is so hard to read any code. Hence, add information in README, in the comments of code, etc. Ask the mentor to help you out with it.

Code Styling

Almost all the languages have a definitive style guide for them. Putting correct indentation, obeying line lengths, etc. are the features which make the code more and more readable.

A ton of projects follow the Google Style Guide, although you should work with your mentor about the code styling specific to the project.

Asking Questions

More often than not, mentors find it difficult to answer vague questions and tend to ignore considering the student is actually not very interested (even if you are!). We have two great articles for you.

Do give them a read:

- -> Stackoverflow's *How do I ask good questions*.
- -> Eric S. Raymond's *How to ask questions the smart way.*

Contact

For any queries, write an email to ieeecsdtu@gmail.com

Website: https://ieeedtu.in/

Shivam Kansal

+91 9811355653

shivamkansal@ieee.org

shivamkansal_2k17co325@dtu.ac.in

Nitin Dhemiwal

+91 9015902007

nitindhemiwal@ieee.org

Acknowledgement

Huge thanks to the authors of the GSoC Student Guide.

The guide serves very well for referencing the outline of the CrossWoC Student Guide.