

## Story of keralarescue.in

A report by  
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**11th August- New update from national daily :** “Almost half of Kerala is reeling under floods caused by incessant rains over the past few days. The worst affected districts are Palakkad, Ernakulum, Wayanad, Alappuzha, Idukki and Kozhikode where NDRF, Army and Navy have been pressed into service for relief and rescue work. 29 people have died in the flood, while 54,000 people have been rendered homeless. The water level in the Idukki dam has been rising over 2401 feet against reservoir capacity of 2403 feet. All shutters of the dam have been opened for first time in 40 years.”

Soon after reading this news, I received a call from one of the Student Representative from IEEE Kochi Hub to enquire about the possible options to support volunteering activities. While this was indeed a great thought, I enquired the possibility of getting few developers to create a portal to enable easy and open collaboration between various stakeholders such as volunteers, potential contributors, citizen who needs help and Government authorities. Within no time, a team of 8 people were mobilised from various locations joined with various skills, just adequate to design and develop the portal by selecting right open source technologies and to host in public cloud. Created the first WhatsApp group for interactions, with the committed efforts from our young engineers, the first version of our Keralarescue.in portal went live within 14 hours on 11th Aug. In parallel, we mobilised over 200 IEEE student volunteers from various colleges in Ernakulam, Palakkad and Wayanad to support the collection of materials from 12th onwards for the flood affected people staying at various camps. The Execom team from IEEE Kerala extended, as always, the helping hand for any request from the development team and from the volunteers.



Fig : Schematic diagram of Keralarescue.in

When we shared the idea on the portal and the volunteering activity with the District Collector in Ernakulam and Sub Collector in Palakkad, the response was very encouraging. We were able to get approx. 500 volunteers on 12th itself and the access to the portal was showing and fast increasing trend. Looking at the flood situation in the state and the adoption and acceptability of the portal by public, we had a discussion with the state Government officials on 13<sup>th</sup> Aug. We received a very positive response and consensus from Government to use this platform for flood relief operations in Kerala. On 15<sup>th</sup> Aug, **Hon. Chief Minister of Kerala**, announced this as the portal for coordinating the flood relief activities in Kerala through his facebook. By that time, there were over 15,000 volunteers registered in the portal with over 10,000 help requests. The journey thereafter the journey of the portal is history..... people across the globe started using

this as THE PORTAL to seek help, register for volunteering service, get contact details of various Government helplines across the state, to get the requirements at various districts, to get information on various updates from government, to get the details about various flood relief camps and collection centres setup at various parts of the state etc. This was one of the worst situation the state had ever faced in the last century, most of the state was under red alert, all rivers are in spate, shutters of 35 major dams were opened and closed one of the major international airport in the state.

The development team got enhanced with the addition of more members from wider IEEE community in the state, professionals from various organisations. Some of the conscious decision taken on the design considerations such as the adoption of Open source Technologies (PostgreSQL, Python with Django framework), Crowd sourced – open development approach, use of GitHub, use of collaboration channels such as Slack helped in the team addition and agility in the development and delivery using DevOps. While many offered needy volunteering support in the field, the technology team from various locations offered round the clock support with over 90 contributors in GitHub, over 1900 members in the slack channel. Technology team offered continuous enhancement to the portal with needy features such as information on camps, inclusion of flood maps, mapping of Camps and collection centres in the Google map, requirements in camps and in districts, regular updates from Govt. and various departments etc.

From 16th, some of us moved to the Government Secretariat control room and was coordinating with various groups from there. To our surprise, many organisations were using the information available in this portal to offer rescue support. A group of 500+ students from Indian Institute of Technology(IIT) / Indian Institute of Science (IISc) from Bangalore, Hyderabad etc. setup a call centre and reached out to the numbers given in each of the help requests, while their team in the field offered local rescue support. They were able to support over 30,000 people.

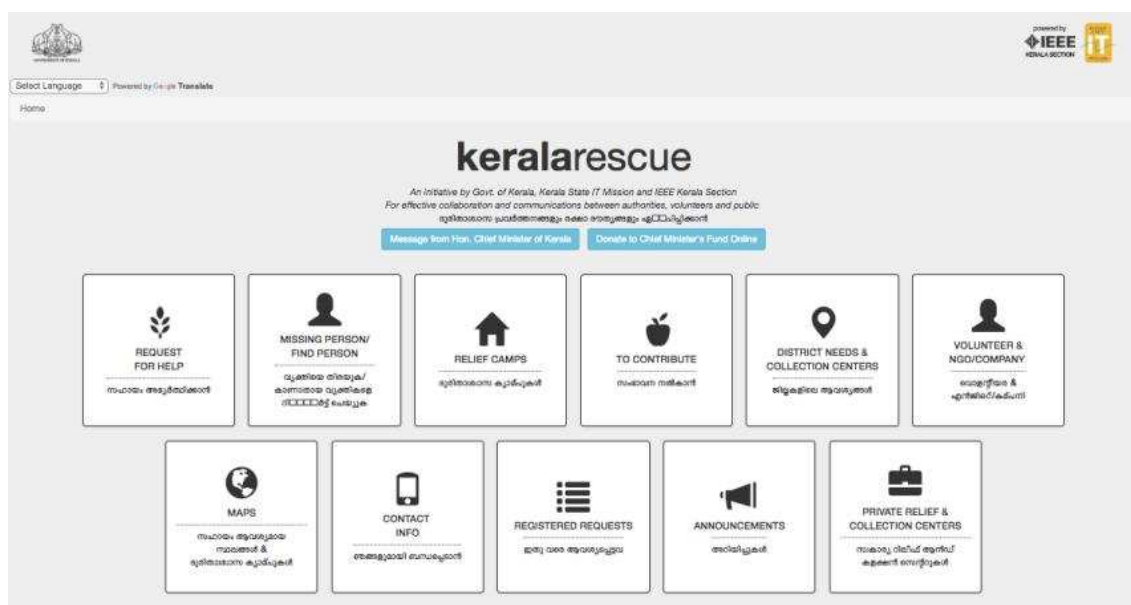


Fig : Keralarescue.in home page

One of the organisation from Trivandrum was checking the requirements of approximately 4000 camps and shared the details with the control centre to enable support. With the interaction and intervention from the Government officials, we were able to enable support from the nearest Civil supplies office to supply food grains and other needy items. And there are many more such cases which got revealed through various people and media.

Some of the statistics for the 2 weeks of operation are:

- ✓ Over 55,000 registered volunteers
- ✓ Over 45,000 help requests
- ✓ Over 17 Million hits on the website
- ✓ Over 1.2 Million people in camps
- ✓ Setup Over 4000 flood relief camps across the state
- ✓ over 1000 commits
- ✓ over 1900 users in slack
- ✓ **ZERO outage** during 2 weeks of operation

This is indeed a true demonstration of the talent and capability of our new generation and their commitment to join hands to develop Keralarescue.in in a true crowd sources model, leveraging open source latest technologies ensuring quality delivery. Many organisation, Google, amazon, Microsoft etc. offered their help... the true help we need at that juncture. Thanks to the great effort and support offered by all the organisation, individuals across the globe. A special THANKS to our young IEEE members, who laid the foundation for this portal, which has become **THE PORTAL for KERALA RESCUE**.

This model can be easily replicated to the disaster management situation and the source code is accessible to the public through GitHub. Secretary, Department of Electronics and IT, Govt. of Kerala had invited the core team and formally thanked the great efforts of the team and given a certificate of appreciation. IEEE Kerala Section had recognised the efforts of the core team and the support of various student chapters in the flood relief activities and given a certificate of appreciation.

## Appeal

Kerala Section and members would like to appeal to you for generous support from all the Sections and individuals for the Reconnection Boards programme. Currently the major contributions have been from Rs. 5,00,000 from the Students Council, NIT Trichy and IEEE Nepal for Rs. 1,00,000 request other sections to match their generosity. Please donate by visiting IEEE Foundation page

<https://www.ieeefoundation.org/ieee-kerala-section-disaster-response-project-fund>

Or Sections in India may just inform Mr. Harish Mysore of IEEE India office and they will do the needful in transferring the money to us. The India office has also the 80G Certificate for Income Tax Benefit and they will issue it to Individuals and Organisations. For any clarifications please write to Amarnath Raja - [a.raja@ieee.org](mailto:a.raja@ieee.org)

All Donations will be gratefully received, with proper mention.

**Amarnath Raja**  
(On behalf of Kerala Section)

**Autonomous delivery concept car with 'Robo Pods' unveiled:** French carmaker Renault has unveiled its autonomous, electric concept car EZ-PRO that can deliver a wide range of goods and services in a city. It has 'Robo Pods' that can carry packages or act as a food truck or a portable grocery store. The system also has a 'Leader Pod' where a human can sit to carry out administrative work.

**Wearable tech that turns a user's skin into loudspeaker made:** Researchers in South Korea have developed a wearable technology that can be attached to a user's skin and work as a loudspeaker. The technology consists of ultrathin, transparent, and conductive hybrid nanomembranes with nanoscale thickness. The nanomembrane loudspeaker operates by emitting thermoacoustic sound through the oscillation of the surrounding air brought on by temperature differences.

**Former Google CEO says internet will split in two by 2028:** Former Google CEO Eric Schmidt at a recent event said that there will be a "bifurcation into a Chinese-led internet and a non-Chinese internet led by America." "If you look at China...the wealth that is being created is phenomenal," he added. "I think you're going to see fantastic leadership in products and services from China," he further said.

**Vodafone & Idea come together to create India's #1 telecom company:** Vodafone India and Idea Cellular have come together to create the world's #2 & India's #1 Telecom company and promised to combine their strengths to serve their customers more of everything. They've committed to a stronger 4G Network, smarter technologies - 5G, IoT, always-on digital customer service, m-commerce among others. It promises unmatched value across services for all its customers.

**Germany launches world's first hydrogen-powered train:** Germany on Monday launched the world's first zero-emission hydrogen trains which will run on a 100-kilometre stretch. Built by French rail transport company Alstom, the trains are equipped with fuel cells that produce electricity by combining hydrogen and oxygen, leaving water and steam as the only emissions. The trains can travel up to 1,000 kilometres on a single hydrogen tank.