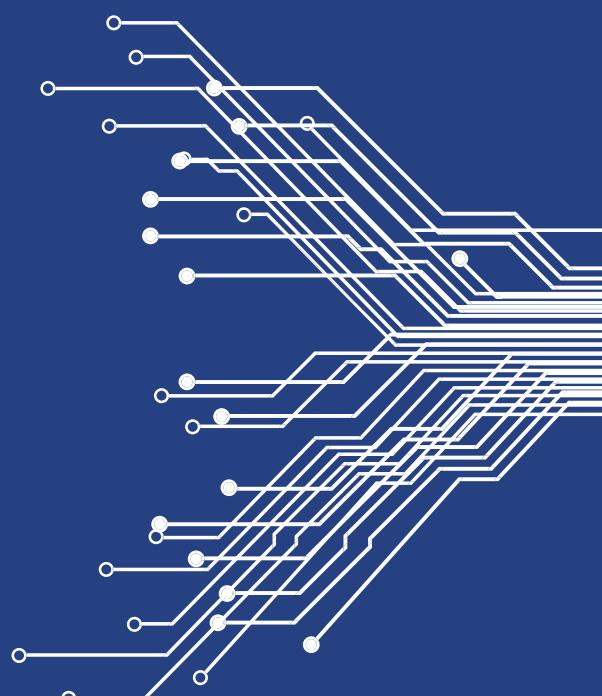
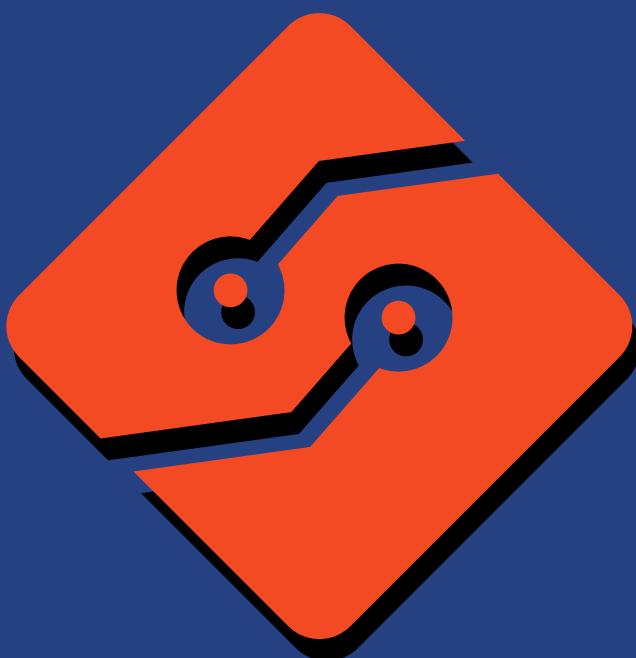
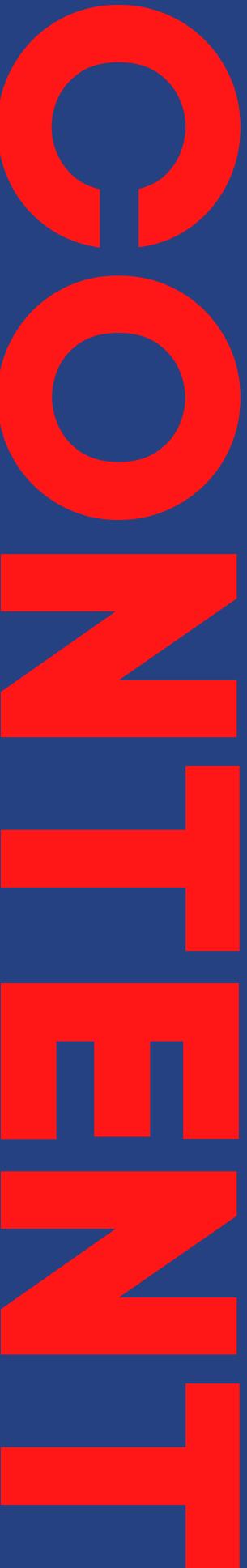


**Society for Integrated Learning of Integrated circuits,  
Communication and Networking systems  
Guru Ghasidas Vishwavidyalaya, Bilaspur**

# **RECRUITMENT HANDBOOK 2022-2023**





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# ABOUT SILICON

SILICON (Society for Integrated Learning of Integrated circuit, Communication and Networking system) is a technical club presented by Department of Electronics and Communication Engineering. This Club is a university-based community. Students from any undergraduate or graduate programs who are interested in the core Electronics and Communication domain are welcome to be a part of it. Students who join our SILICON Club can develop their knowledge regarding Core ECE technologies in a peer-to-peer learning environment and will create new solutions for local as well as global problems in our society and the industries.

## OBJECTIVE

SILICON Club is a student-led initiative aimed at establishing university-based communities for students interested in primarily three technologies:

- ★ Electronics System Design along with VLSI and PCB Designing
- ★ IoT with Embedded systems
- ★ Communication and Networking Systems

and thrive these communities with their technical mindset and vision to build solutions for a better tomorrow. The society is aimed at motivating and training students who will encourage other students to explore newer areas of technologies so that they will be ready for the workspace with a right and required skillset when they step out into the world. The main and most promising goal of this technical community is imparting in depth knowledge to the students, facilitating technical activity, hand-on projects and cater them to the changing industrial demands, global and societal needs.

# OUR VISION



Our vision is to identify and promote university students interested in studying Electronics and Communication technologies and they want make their carriers in core technologies. This platform was created to help students in essential technology courses including Electronics System Design, IoT with embedded systems, and Communication and Networking Systems to bridge the gap between theoretical knowledge and real-life applications.

Participating in technical events, students will have a significant impact on job opportunities. Students who are collecting technical skills and want to be part of real projects have an advantage in key areas of professional life.

# OUR MISSION



1

## INVOLVE:

Involve students on campus interested in core technologies, including those with diverse backgrounds and different majors.

2

## IMPROVE:

Improve student's technical knowledge and new skills are gained through workshops, in-person trainings and live project activities.

3

## INNOVATE:

Innovate great solutions for problems local as well as global with your new learnings and skill sets. Support your community by helping others to learn as well.

# OUR TARGETS



## Minimum Deliverables by SILICON

- We help students to acquire and develop new skill-sets by conducting various lectures and workshops.
- We motivate and guide them to come up with innovative projects that tackle real-life problems, Which will cut the gap between theoretical and real-life applications.
- We provide resources and the technical support, how to realize and shape their projects.
- Through regular meetings and sessions we improve students' technical and leadership skills in a peer-to-peer learning.



## Deliverables by Members of SILICON

- Ensure that SILICON runs smoothly and efficiently on campus.
- Providing students with advance industry knowledge and hand-on skills.
- Working with maximum attention to the department to which they are assigned.
- Actively participating in SILICON on-campus and off-campus sessions and events.
- Demonstrating interest in resolving community issues and a willingness to learn new things.

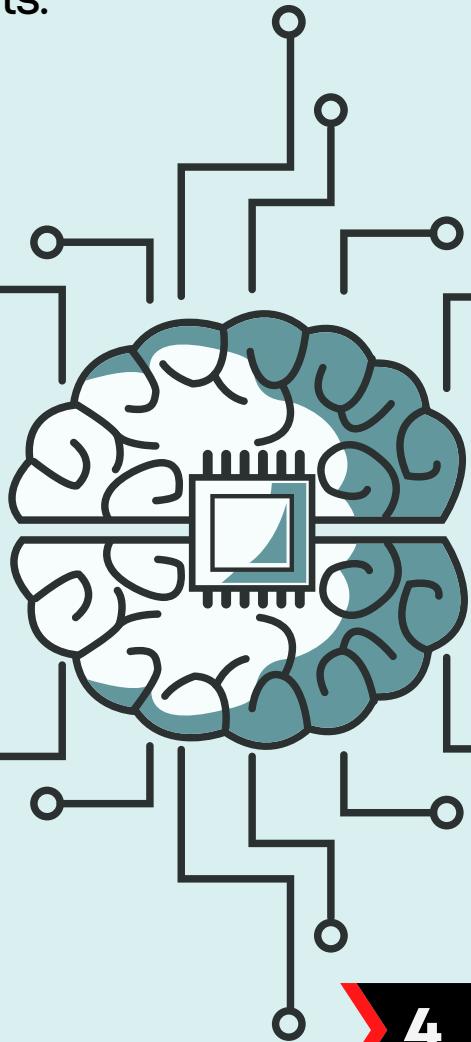
# TECH CLUBS

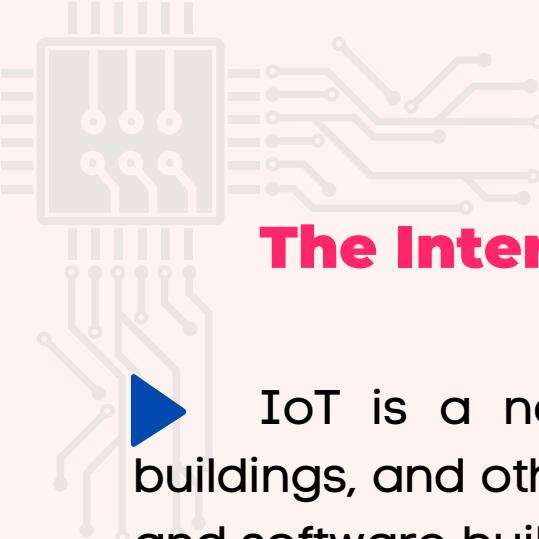
There will be THREE different technical clubs under an umbrella of SILICON:

## **Electronics System Design (ESD) Club :**

► ESD includes sub sections such as electronic components design, semi-conductor and product design. Bringing together a set of key EDA topics, this club enhance the core knowledge, software tools Vivado, algorithms, methodologies, and infrastructure required to optimize synthesis, verification, and manufacturing test of a functional & reliable integrated circuits.

Along with this it also includes PCB Designing where students learn design and simulate electrical systems, from simple circuits to complex electronics. Students improve electromechanical design with true electrical and mechanical collaboration with the help of right software tools and oversees the creation of printed circuit boards (PCB) used in most electronic devices, phones and computers.





## The Internet of Things (IoT) Club :

 IoT is a network of physical objects, vehicles, buildings, and other items that have sensors, actuators, and software built in to collect and exchange data. It is predicted to have a significant impact on practically every industry, including manufacturing, healthcare, and transportation, and will enable new services and business models that would not have been conceivable without it, also known as the Fourth Industrial Revolution. An embedded system is a combination of computer hardware and software designed for a specific function. Embedded systems may also function within a larger system. The systems can be programmable or have a fixed functionality.

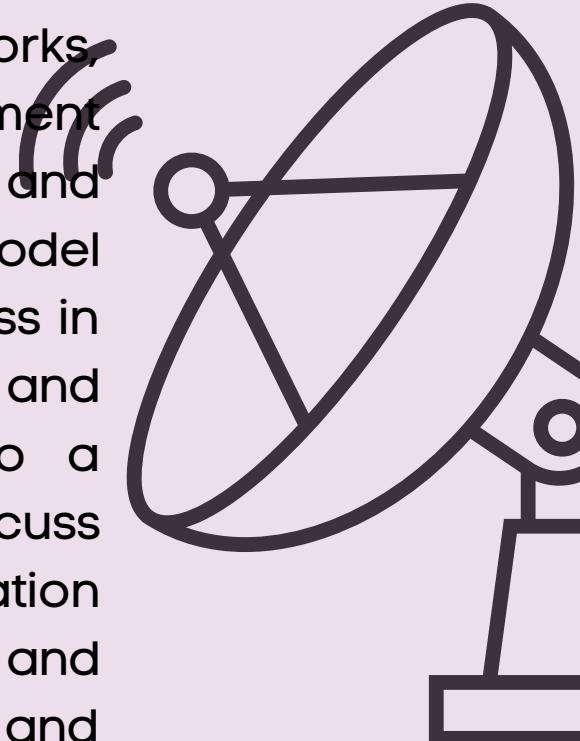


Embedded systems are commonly found in consumer, home appliances industrial, automotive, medical, and aerospace and military applications. Here students work on microcontroller systems like (Arduino & Raspberry pi). With the help of projects, they learn how to integrate all distinct components of IoT: sensors/devices, connectivity, data processing, and a user interface and try to create a real-life solution.



## Communication and Networking Systems (CNS) Club :

► The field of communication includes a collection of individual transmission systems, telecommunication networks, relay stations and terminal equipment usually capable of interconnection and interoperation. The transmission model describe as a one-way, linear process in which a sender encodes a message and transmits it through a channel to a receiver who decodes it. Here we discuss and design Wireless Communication Systems (antenna, transmitter and receiver, signal types, signal strength and degradation) with the help of proper hardware and software tools.

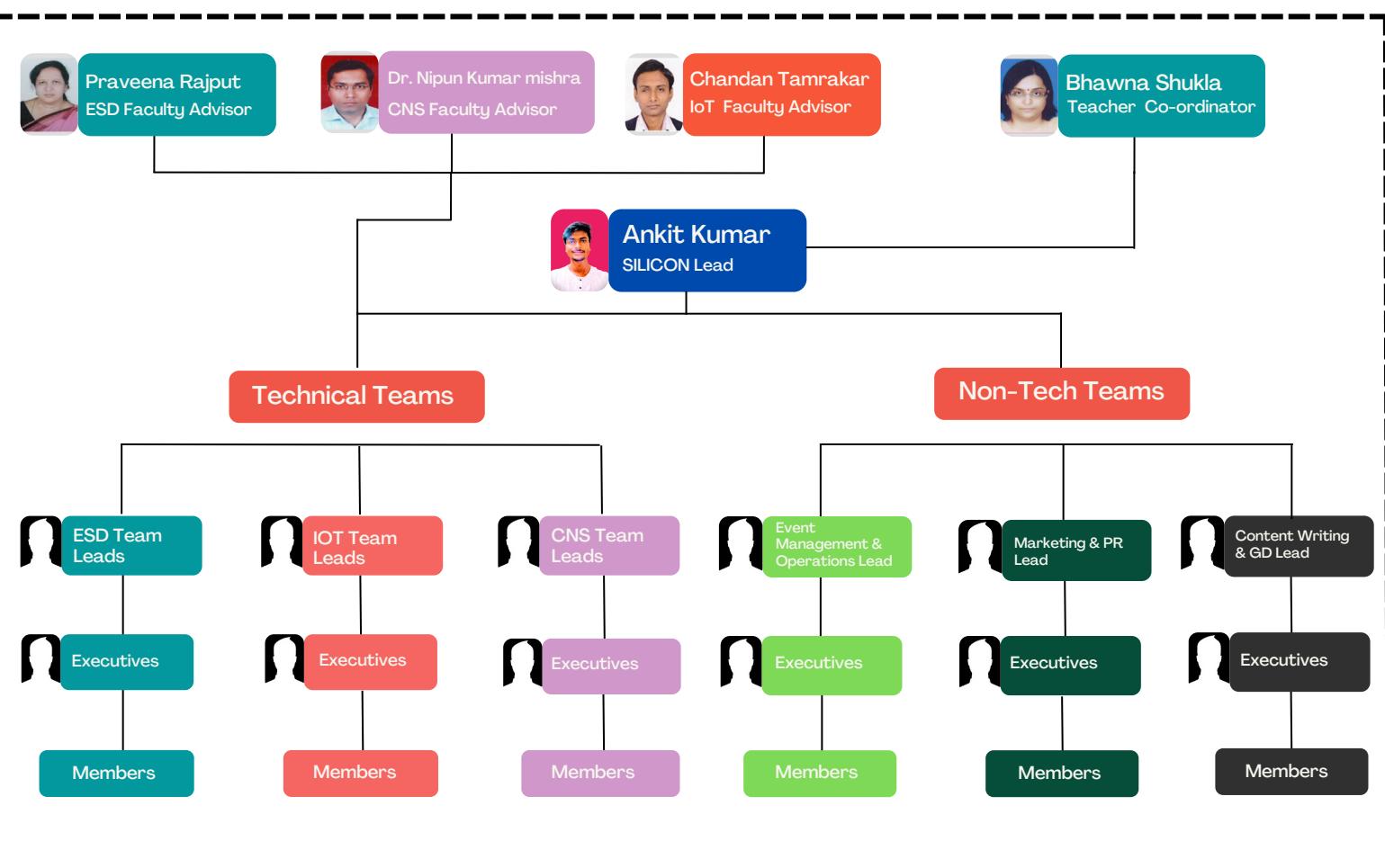


While in the context of networking systems it includes the analysis, design, implementation, and use of local, wide-area and mobile networks that link computers together. The Internet itself is a network that makes it feasible for nearly all computers in the world to communicate.

# STRUCTURE OF CLUB

## TEAM HIERARCHY

Every community's success depends on its members and the team's success can't be achieved without proper hierarchy. It's only purpose for a clearer understanding of club member's roles and responsibilities. Thus SILICON also has a hierarchy of members, where each position ranked is directly dependent on the outputs provided by them.



### THE OPEN POSITIONS

**TECHNICAL TEAM - 6 LEADS + 3 SR. EXECUTIVES + 12 MEMBERS = 21**

**NON-TECH TEAM - 3 LEADS + 3 SR. EXECUTIVES + 18 MEMBERS = 24**

**TOTAL = 21 + 24 = 45**

## STRUCTURE OF TECHNICAL TEAMS

- Each club will have Teacher Coordinator and two Project Management & Tech Leads, one male and one female. The following table will give an idea about the human resource involved in the club.
- In every technical club, there are two membership positions, which are reserved for the upcoming first year batch of the college in order to prepare the future human resource of the college as well as the club.

Technical Team				
TEAM NAME	LEADS	Sr. Executive	Executive	TOTAL
Electronics System Design (ESD)	1 + 1	1	2 + 2	4+1+2
INTERNET OF THINGS (IoT)	1 + 1	1	2 + 2	4+1+2
Communication & Networking Systems (CNS)	1 + 1	1	2 + 2	4+1+2
<b>GRAND TOTAL</b>	<b>3 + 3</b>	<b>3</b>	<b>6 + 6</b>	<b>12+3+6</b>

**6** positions are reserved for First Year student.



This colour represent Female Tech Leads.



This colour represent First Year Students.

## STRUCTURE OF NON-TECHNICAL TEAMS

- The club not only aim to facilitate the technical skills inside a student but also provides a platform to enhance the interpersonal non-technical skills.
- The following table provides a brief overview of the Non-Technical positions in the team. The selection process is same for these positions where the emphasis will be given on the skills like content design, graphic designing and research methodologies.

### Non-Tech Team

TEAM NAME	LEADS	Sr. Executive	Executive	TOTAL
Event Management & Operations	1	1	4 + 2	6 + 2
Marketing & PR	1	1	4 + 2	6 + 2
Content Writing & Graphic Design	1	1	4 + 2	6 + 2
<b>GRAND TOTAL</b>	<b>3</b>	<b>3</b>	<b>12 + 6</b>	<b>18 + 6</b>

**6** positions are reserved for First Year student.



This colour represent First Year Students.

# PORTFOLIO



## TEACHER CO-ORDINATOR

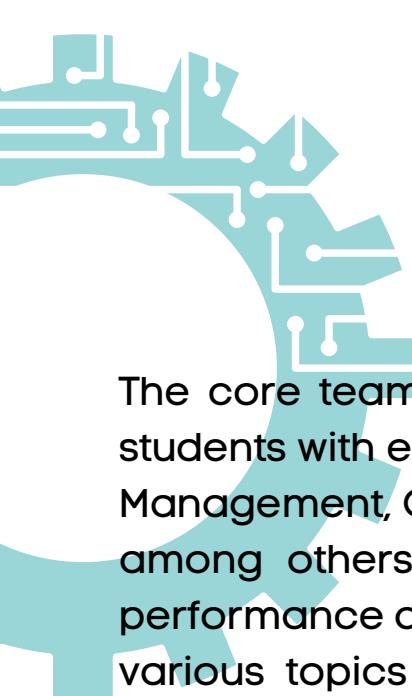


Teacher Co-ordinator is the guide in achieving the major objectives of the SILICON and analysing all the possible ways to reach the visioned goal of the club. On the other hand, should facilitate communication between club and the institution's management. It is his/her responsibility to lead the major discussion with SILICON Lead about productivity and efficiency of club and its members. He/she is the higher authority of the SILICON who has the power to take final decision in favour of community growth and to maintain its decorum.

## SILICON LEAD

The SILICON lead is in-charge of the club's decorum, as the name implies, It's His/her responsibility to include brainstorming plans for the club's future development with the core team. They are the dreamers who believe that technology has the ability to change the world. They've accepted the responsibility of influencing students and equipping them with the tools they need to affect their communities. The role of SILICON Club Lead will put students' abilities to the test while also assisting them in their development as individuals and team players.





# CORE TEAM

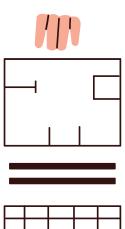
The core team consists of the Lead of the society and numerous students with expertise in areas such as Event Management, Project Management, Community Development, and Women Empowerment, among others. The core team keeps track of the club's overall performance and plans a variety of activities, events and lectures on various topics in multiple technologies. The core team is also in charge of making sure that every member and volunteer are maintaining their technical and community leader potential. The core team will play an important role in the development of our next generation platform, collaborating closely with our students.

## FACULTY ADVISOR

Each tech team has a specialized Faculty Advisor who combine and coordinate efforts of many members to assure the work-based learning effectively and efficiently that help the students to develop knowledge, skills, attitudes, and work habits. Faculty Advisor role is to support their respective team by encouraging, advising, and guiding in any manner feasible. And one another role for faculty advisor is to guide the Tech Leads in management of projects chosen by club members.



# PROJECT MANAGEMENT AND TECH LEAD



Being the representative of the technical team on the board, it's his/her responsibility to propose a new technical workshop or any new resource that the club should acquire. Apart from this, he/she is responsible for any tech assistance required for any event conducted by SILICON as well as have responsibility to guide and support the club members in their personal projects and make arrangements for their required resources.

The ideal applicant will have prior technical experience, as well as expertise in managing a team, establishing and scaling products. Each team's tech lead must report to the Faculty Advisor, and the team lead will be responsible for the team's long-term performance in that particular technical domain.

-> The presence of a Female Tech Lead in each team is intended to encourage female participation and give them a platform to advance their careers in technology. She has to work closely with the tech lead to provide a solution to any technical hurdle the club faces.

## Roles :

- Representing your team and club to the core team of SILICON.
- Leading a team of tech enthusiasts and conducting different events for every 15 days (Events can be anything from a small workshop/discussion to a large competition).
- In case of organizing events, be sure to provide a detailed report regarding the same before the event to the Event Management & Operations Lead.
- As The Project Manager, you have to ensure the project works of the club members (Provide more info on the projects after the selection and guide everyone irrespective of the year of study and standard of project).

## **Eligibility :**

- Lead :- Must be a Third Year Student (ECE branch) may apply for the post.
- Sr. Executive :- May be a Third/Second Year Student (ECE branch).

## **Selection Criteria :**

- The applicant have to present a proposal for the club's upbringing and path map that demonstrates the candidate's vision as a team leader to the selection committee.
- Ability to think out of the box and communicate the same thing confidently.
- Specializing in respective domain's emerging technologies & have previous experience of project management in any community/company/competition.
- Final selection will be on the basis of the performance in the interview.

## **TECH EXECUTIVES**

There are twelve open positions for the Technical Team Members. We are in search of some tech enthusiasts in IT GGV who can take up the challenges as a member.

## **Roles And Responsibilities :**

- Cooperating with the Lead and Sr. Executive of the club in conduction of every event.
- Attending regular meetings and staying updated with the happenings inside the club.
- Learning deeper in the technical skills and helping the members of the club.

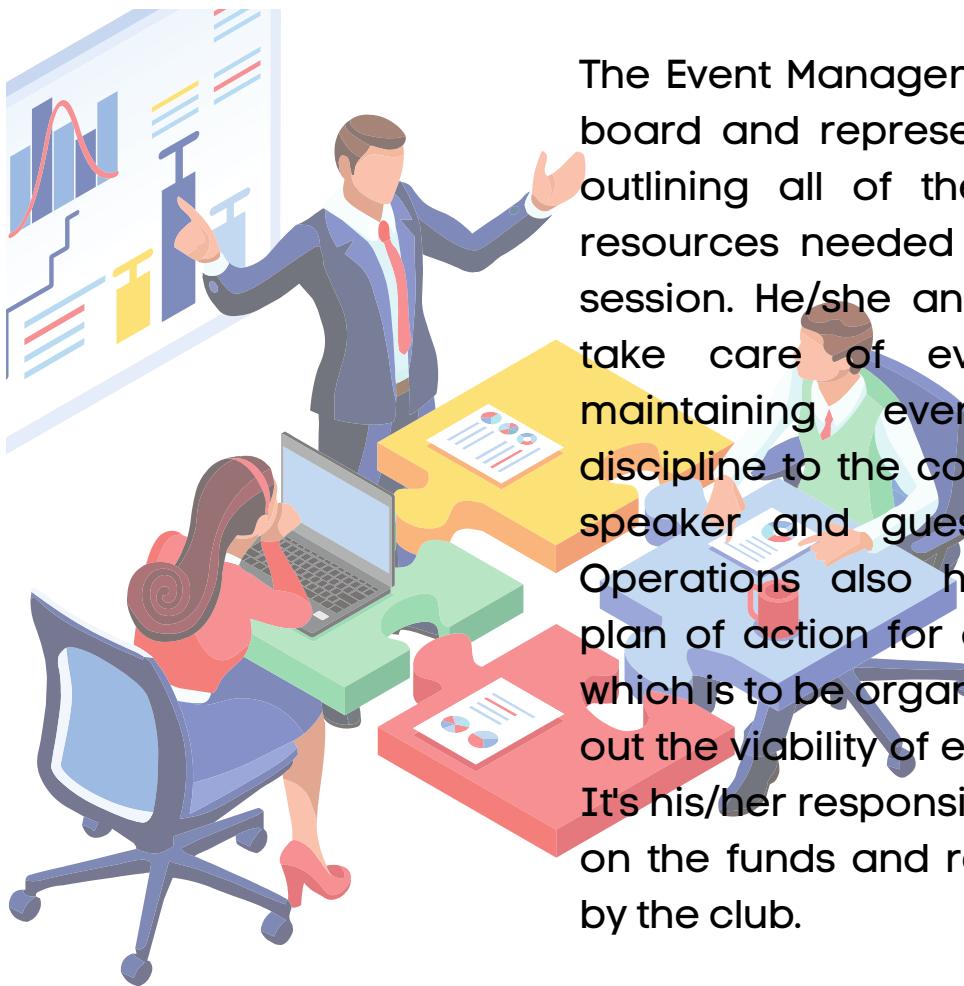
## **Eligibility :**

- Anyone from ITGGV, Third year and Second year students may apply.

## **Selection Criteria :**

- Quality of Resume and Technical knowledge in the domain applied.
- Performance in core team interview

# EVENT MANAGEMENT AND OPERATIONS LEAD



The Event Management Lead sits on the board and represents his or her team, outlining all of the requirements and resources needed for each event and session. He/she and his/her colleagues take care of everything, from the maintaining event decorum and discipline to the comfort of the external speaker and guests. As the Lead of Operations also he/she establishes a plan of action for any event or session which is to be organised. And has to work out the viability of each event organised. It's his/her responsibility to keep a check on the funds and resources being used by the club.

## Eligibility :

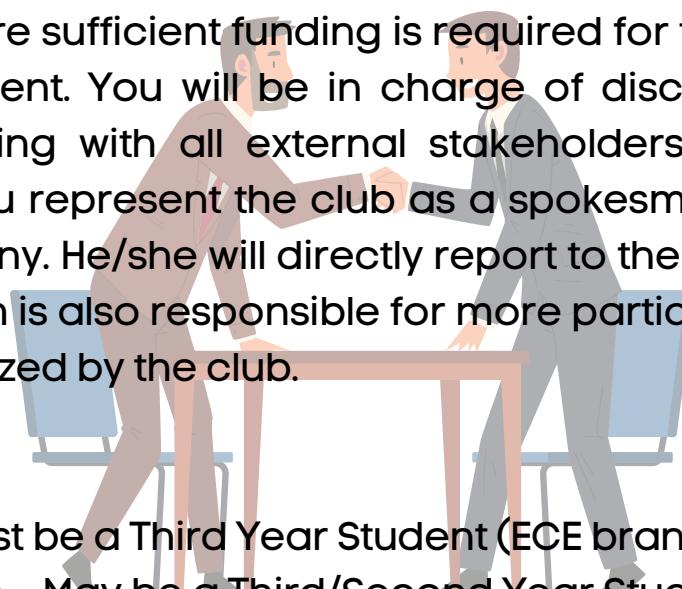
- Lead :- Must be a Third Year Student (ECE branch) may apply.
- Executives :- May be a Third/Second Year Student (ECE branch) may apply.

## Selection Criteria :

- Specializing in any management field and have basic technical knowledge about the tech domains.
- Previous experience of techno-management positions.
- Ability to conduct events efficiently & design events in accordance with the necessity of the club.
- Ability to think independently without relying on outside assistance.
- Final selection will be on the basis of the performance in the interview.

# **MARKETING AND PUBLIC RELATIONS LEAD**

It consists of a group of people that are in charge of marketing and public relations. Leading the marketing and public relations (PR) Team is a major responsibility, because the Club is planning a large number of events, there sufficient funding is required for the Team to launch a successful event. You will be in charge of discovering, introducing, and negotiating with all external stakeholders for the events and workshop. You represent the club as a spokesman and ambassador of the company. He/she will directly report to the SILICON Lead. Other than this team is also responsible for more participation of students in events organized by the club.



## **Eligibility :**

- Lead :- Must be a Third Year Student (ECE branch) may apply.
  - Executives :- May be a Third/Second Year Student (ECE branch) may apply.

## **Selection Criteria:**

- Specializing in techno-marketing field and a very strong communication skill-set.
  - Ability to represent the SILICON in-front of the public.
  - Previous experience of marketing and PR positions in any community.
  - Ability to think dimensionally without relying on other's opinion.
  - Final selection will be on the basis of the performance in the interview.

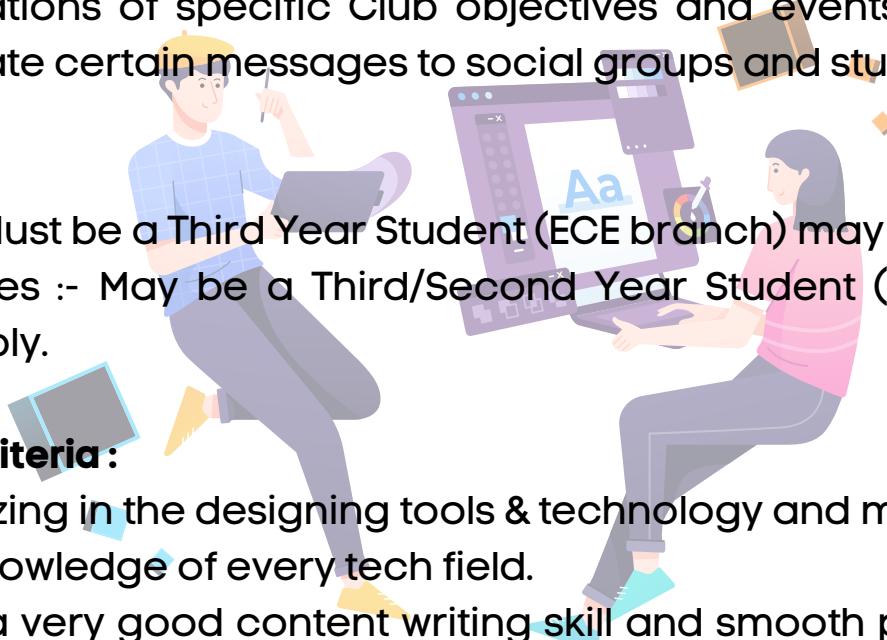


# **CONTENT AND GRAPHICS DESIGNING LEAD**

They plan, author, and update site information as part of the Content Creation process. Part of the job includes writing blog posts and articles, as well as content for specialized platforms. The Graphic Designing Team, on the other hand, is in charge of developing visual communications of specific Club objectives and events in order to communicate certain messages to social groups and students.

## **Eligibility :**

- Lead :- Must be a Third Year Student (ECE branch) may apply.
- Executives :- May be a Third/Second Year Student (ECE branch) may apply.



## **Selection Criteria :**

- Specializing in the designing tools & technology and must have the basic knowledge of every tech field.
- Having a very good content writing skill and smooth practice with writing tools.
- Previous work experience in content writing & graphics designing.
- The credibility of a resume and skills for the same domain.
- Final selection will be on the basis of the performance in the interview.



# SELECTION PROCEDURE



The recruitment process will consist of the following Three steps:



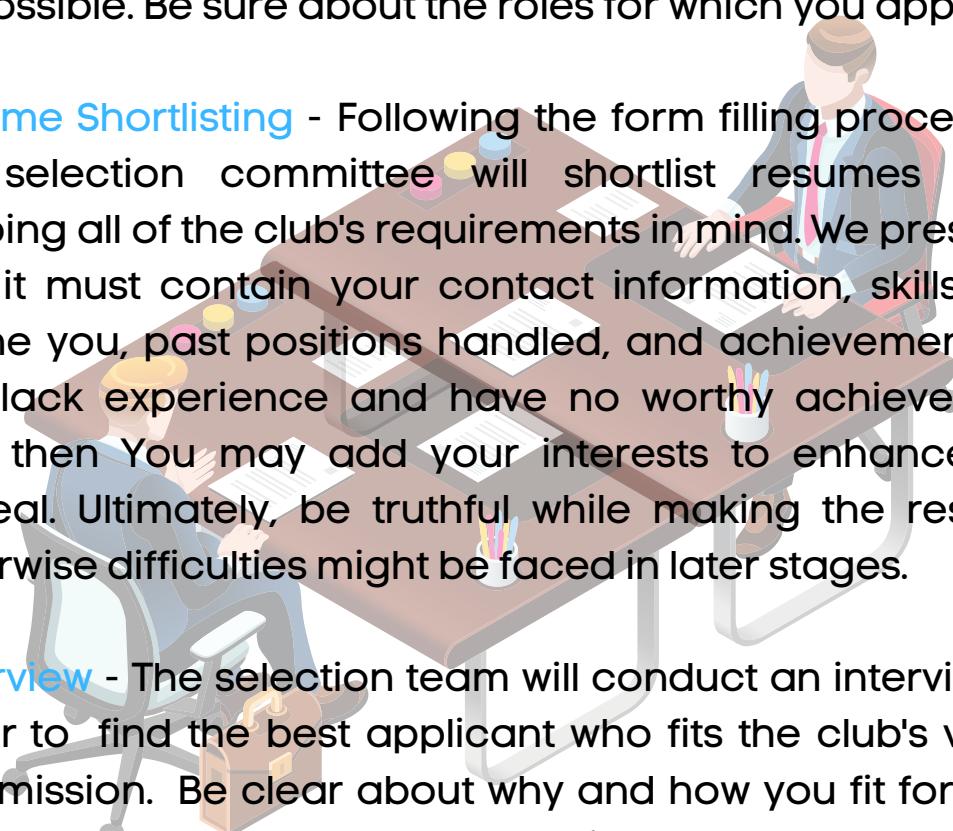
**Filling out the Application Form** - Any potential candidate from ITGGV may apply for any position in the team other than the Lead positions. The application will begin with a Google form in which the applicant will be prompted to fill out the requested information. The candidates who are applying to join SILICON should have a clear vision about why to join after that fill out the online google form as soon as possible. Be sure about the roles for which you apply.



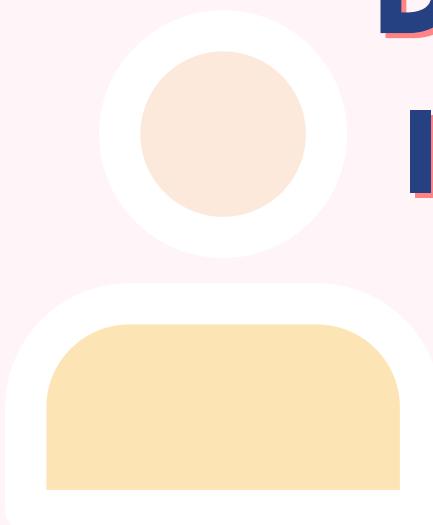
**Resume Shortlisting** - Following the form filling procedure, the selection committee will shortlist resumes while keeping all of the club's requirements in mind. We presume that it must contain your contact information, skills that define you, past positions handled, and achievements. If you lack experience and have no worthy achievement now then You may add your interests to enhance the appeal. Ultimately, be truthful while making the resume otherwise difficulties might be faced in later stages.



**Interview** - The selection team will conduct an interview in order to find the best applicant who fits the club's vision and mission. Be clear about why and how you fit for your desired role. The most central fact is there won't be a need to deceive as it might be obscure your personality.



# DO'S AND DON'TS IN YOUR RESUME



## WHAT TO INCLUDE ?

- Previous Internship/Part-Time experience (must).
- Skills with a validation (If adding a skill, add a project/competition/conference you have attended which involves that skill).
- Technical Projects/Hackathons that you have done, most preferably a github account.
- Community experience (if any).

## WHAT NOT TO INCLUDE ?

- Don't paste a skill into your resume without any validation, that may put you in trouble during interview.
- Don't write your school achievements, please write only technical achievements. If there are none, no problem, because you are here to learn.
- The language of the resume must be in favour of your accomplishments rather than false positive events.

# **FOR ANY QUERY**

**WHATSAPP THIS NUMBER**

**8400134829**