

JERUSALEM COLLEGE OF ENGINEERING, CHENNAI - 100

DEPARTMENT OF SCIENCE AND HUMANITIES

ISTE - ANNUAL REPORT

OFFICE BEARERS- 2021-22

S.No.	DESIGNATION	INCHARGES
1	Convenor	Dr.V.Jamuna
2	Coordinator	Ms. S.Sangeetha
3	Faculty Advisor	Dr.John Jebarathinam
4	Chairperson	F. Signeta Chloria(CSE B)
5	Members	1.S.J. Keerthi Vaasan(CSE A)
		2.P. Kanish kumar(ECE)
		3.P. Arthi(EEE)
		4.J. Varsha(CIVIL)
		5.S.K. Lokeswar (IT)
		6.U. Harini(BME)

The newly appointed office bearers were introduced on 15.06.22 and their roles and responsibilities were described. ISTE student members meet fortnightly with office bearers, staff coordinators and faculty advisors. Several meetings were held to promote ISTE awareness among first-year and second-year students across all engineering branches. The next objective was to organize activities to develop students' technical skills. Workshops were conducted. The consolidated list and details of the activities are given below.

S.No.	Nature of the programme	Topic of the event	Date	Resource person/Invited Guest
1	Induction	ISTE Inauguration	15.06.2022	ISTE-EXECUTIVE COUNCIL MEMBER
				Dr.P. Sakthivel, Professor,
				Dept. of Electronics & Commn. Engg.
				College of Engineering,
				Guindy Campus,
				Anna University,
				Chennai–600025
				09444412789(M)
				Email:sakthivelp@yahoo.com
2	Paper	State level	15.06.2022	Dr.P.Asha
	Presentation	programme on		Head of the Department
		Nurturing the		Civil Engineering
		hidden talents of		JCE

		Budding Engineers		Dr. Shreeja.V. Francies Head of the Department Electronics and communication Engineering JCE
3	Hands on Workshop	Application Development	14.09.2022	Dr. Doreen Robin Director of Computational Intelligence Research Foundation Ayanavaram Chennai-600023
4	Hands on Workshop	Web Development	28.10.2022	Mr. S. Kishore Kumar Software Developer Manvaasam Community Thirupattur
5	Hands on Workshop	Web Development	24.11.2022	Mr. Karthick Arumugam Software Developer Manvaasam Community Thirupattur
6	Hands on Workshop	Arduino Programming	10.02.2023	Mr. K. Mathivanan Technical Lead at SigeTech Embedded and Robotics Solution Pvt Ltd Perungulathur Chennai-600063
7	Hands on Workshop	Robotics	03.03.2023	Sige Tech team SigeTech Embedded and Robotics Solution Pvt Ltd Perungulathur Chennai-600063
8	Hands on Workshop	Physiological dataacquisition and Analysis	10.03.2023	Dr. K. Baskaran Biomedical Engineer and South regional manager, Gentech Marketing and Distribution Pvt Ltd South Region New Delhi-110055

REPORT OF THE EVENTS

1. PAPER PRESENTATION (INTER and INTRA COLLEGE)

INTER-COLLEGE:



ISTE Student Chapter of JCE conducted an Inter-college "Paper Presentation" competition on15th June 2022.

On 6th June 2022, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted an Inter-College "Paper Presentation" at the Seminar Hall. By 10:30am the event started with a small opening ceremony to welcome the judges Dr.P. Asha, HoD of Civil Engineering, JCE and Dr. Shreeja.V. Francies, HoD of Electronics and Communication Engineering, JCE. After the opening ceremony, the event started and each team proceeded to present their paper. Each team was given a time limit of 10 minutes within with the students presented their paper with expertise. After all the inter-college teams completed their presentations, the scores were consolidated and the result announcements were made during the validation ceremony. The proceedings of the event were witnessed by the Dean of Student Affairs, HoD S&H department, ISTE coordinator and professors. The validation ceremony was graced by the HoD of S&H department, the judges, ISTE coordinator and professors. The teams that placed first and second were awarded certificate of appreciation along with the prize money

of Rs.1500 and Rs.1000 respectively. The event came to an end with a vote of thanks. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator and the Dean of Student Affairs of Jerusalem College of Engineering. The students left the seminar hall with newly gained knowledge and with a feeling of satisfaction.

INTRA-COLLEGE:

On 6th June 2022, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted an Intra-College "Paper Presentation" for all the ISTE student members of Jerusalem College of Engineering at the seminar hall. By 12:30pm the event started with a small opening ceremony to welcome the Judges Dr.P. Asha, HoD of Civil Engineering, JCE and Dr. Shreeja.V. Francies, HoD of Electronics and Communication Engineering, JCE. After the opening ceremony, the event started and each team proceeded to present their paper. Each team was given a time limit of 10 minutes within which the students presented their paper with expertise. After all the intra-college teams completed their presentations, the scores were consolidated and the result announcements were made during the validation ceremony. The proceedings of the event were witnessed by the Dean of Student Affairs, HoD S&H department, ISTE coordinator and professors. The validation ceremony was graced by the HoD of S&H department, the Judges, ISTE coordinator and professors. The teams that placed first and second were awarded certificate of appreciation along with the prize money of Rs.1500 and Rs.1000 respectively. The event came to an end with a vote of thanks. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator and the Dean of Student Affairs of Jerusalem College of Engineering. The students left the seminar hall with newly gained knowledge and with a feeling of satisfaction.



ISTE Student Chapter of JCE conducted an Intra-college "Paper Presentation" competition for all the ISTE student members of JCE on 15th June 2022.

2. ISTE- STUDENT CHAPTER Quiz-Competition (24.08.2022)

ISTE Student Chapter of Jerusalem College of Engineering, Chennai, organized an Inter college quiz competition "KNOCK OUT (K.O. Quiz) for the second year ISTE members of Jerusalem College of Engineering at the auditorium on 24th August 2022. Quiz competitions are always interesting and informative, which provide excitement among the students. The main objective of this event is to make them aware of recent general knowledge related basic science and Mathematics. It was a very informative and knowledge enriching competition for the participants. Overall, 52 teams of students from our institute had registered.



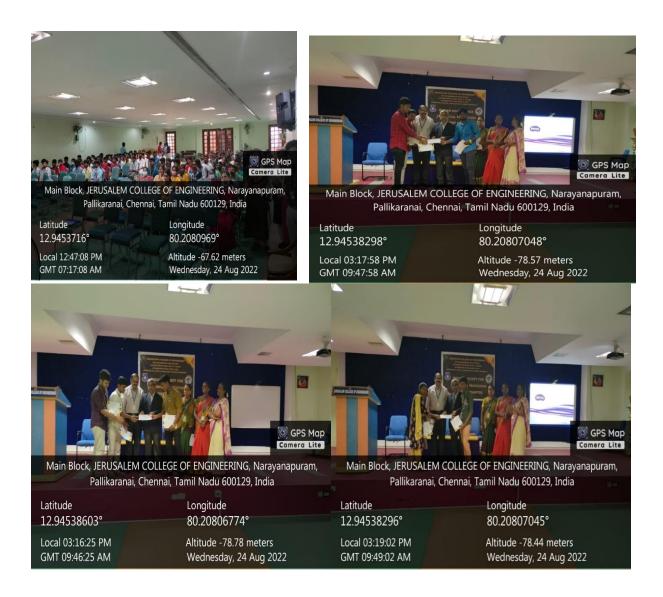
The programme started at 12.30noon with an opening ceremony graced by Dr. P. Anuradha, Dean of Academics who delivered the special address, she gave the insights about various activities done by ISTE for the benefits of the students. Dr. V. Jamuna, Dean of Student Affairs of the college highlighted the importance of industry-Academia interaction and explained about various awards given by the ISTE. After the opening ceremony, the contest started by the rules and regulations read out to all the participants. The event consisted of three rounds (Round 1- Qualifier, round 2- Pyramid, round 3- Rapid fire). The Quiz started with the first round, Qualifier. The student belonging to teams of 3 were given 20 minutes to answer 20 basic engineering multiple choice questions after which 15 teams were shortlisted to move on to round 2 based on their qualifier scores. Those qualified 15 teams were divided into 3 batches consisting of 5 teams each. Students played round 2 batch-wise. In round 2, each team was given 10 cups with two balls.

After the question was projected, the teams competed to build a paper cut pyramid and broke them using the balls they were provided with. The team that first demolished the pyramid completely got the chance to answer. Each batch competed to answer 5 questions. After all the 3 batches completed round 2, 4 teams were shortlisted as the finalists to enter round 3 (Rapid fire) based on their round 2 scores. In round 3, after projecting the question the first team to raise their hand was given the chance to answer. The students showcased their brilliance by rapidly answering the questions. After 10 questions, the winner, first runner-up and second runner-up were decided on the bases of their scores in the 3rd round. All the activities of the Quiz Competition were well coordinated by our ISTE Chairperson Signeta Chloria F second year CSE B.





The proceedings of all the rounds were witnessed by Dr V. Jamuna, Dean of Student Affairs, Dr. Beula Shanthi, HoD S&H department and Ms. S. Sangeetha ISTE coordinator and professors. The prize distribution ceremony was graced by ourPrincipal, Dr. Ramesh. S. Our Faculty advisor Dr. John Jebarathinam, Dean of IQAC and Dr. Beula Shanthi, HoD of S&H department. The teams which secured first, second and third place were awarded certificate of appreciation along with the prize money of Rs.1500, Rs.1200 and Rs.900 respectively. The event came to an end with a vote of thanks. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator and the Dean of Student Affairs of Jerusalem College of Engineering. The students left the auditorium with newly gained knowledge and with a feeling of satisfaction.



HANDS-ON WORKSHOP

3. Application Development- II CSE A(14.09.2022)



ISTE Student Chapter of JCE organized a "Hands-on Workshop on Application Development" for all the Second year CSE A students on 14th September 2022.

<u>REPORT</u>

On 14th August 2022, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted a Hands-on workshop on "Application development" for the ISTE members from II-year CSE A at the Data networking lab. The Event started by 9:30am with an opening ceremony graced by the Speaker Dr. D. Doreen Robin (Director of Computational Intelligence Research Foundation. She is a Data Scientist and a Machine Learning and Deep learning trainer and a keynote speaker), Dean of Student Affairs and the HoD of S&H Department. After the opening ceremony, the session was handed over to the speaker and the hands-on workshop began. The Speaker started by explaining about data science, predictive analysis in healthcare, deep learning and data analysis. After completing the basic introduction and before moving on to the hands-on part, the students were given a 10-minute break. After the break, the student assembled in the lab and the workshop was resumed. The Speaker proceeded to teach the students how to visualize an analytic model. Then the Speaker taught the students how to create their own analytic visualization model using the titanic database. The students followed her instructions keenly and proceeded with the training. The Speaker gave attention to all the students. When any student faced difficulty in proceeding further, the Speaker approached them and cleared all their doubts personally. By 12:35pm, the students were given their lunch break. The students had their lunch and then the session resumed by 1:40pm. The chief guest proceeded to teach in detail. By 3:00pm the Speaker started to conclude the workshop by summarizing everything the students learnt that day and gave many examples of where those concepts can be implemented in real life. The workshop was filled with audio, visual and physical learning. The workshop came to an end by 3:16pm. The proceeding of the workshop was witnessed by the Dean of Student Affairs, HoD of S&H department, ISTE coordinator and professors. The closing of the workshop was done with a little ceremony including the feedback of the students and a vote of thanks. The closing ceremony was graced by the Speaker Dr. D. Doreen Robin, Dean of Student Affairs and the HoD of S&H Department of the college. Finally, by 3:30pm the students took a group photo with the chief guest. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator, Ms. S. Sangeetha and the Dean of Student Affairs, Dr. V. Jamuna of Jerusalem College of Engineering. The students left the Data networking with newly gained knowledge with a feeling of satisfaction.





ISTE Student Chapter of JCE organized a "Hands-on Workshop on Web Development" for all the Second year CSE B students on 28th October 2022.

<u>REPORT</u>

On 28th October 2022, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted a Hands-on workshop on "Web development" for the ISTE members from II-year CSE B section of Jerusalem College of Engineering at the Database Management lab. By 9:30 am the event started with an opening ceremony graced by the Resource person Mr. S.Kishore Kumar (Software developer at Manvaasam, Thirupattur) and his team, Dean of Student Affairs, HoD of S&H Department and the HoD of CSE Department of the college. After the opening ceremony, the session was handed over to the resource person and the hands-on workshop began. The resource person started by explaining the basic elements of web development, front end and what is back end and the basic software's needed to develop a web. After completing the basic introductions, the resource person proceeded to teach the students on how to customize the predefined code to make their own personal website. The students followed their instructions keenly and proceeded with the workshop. The Manvaasam team gave attention to all the students. If any student faced difficulty in proceeding further, the Manvaasam team approached them and cleared all their doubts personally. By 12:00 pm, the students were given their lunch break. The students had their lunch and then the session resumed by 1:00 pm. The resource person proceeded to teach in detail. By 3:00 pm the resource person started to conclude the workshop by summarizing everything the students learnt that day and gave many examples of where those concepts can be implemented in real life. The workshop was filled with practical first-hand learning. The workshop came to an end by 3:20 pm. The proceedings of the workshop were witnessed by the Dean of Student Affairs, HoD of S&H department, ISTE coordinator and professors. The closing of the workshop was done with a little ceremony including the feedback of the students and a vote of thanks. The closing ceremony was graced by the Manvaasam team, Dean of Student Affairs, ISTE coordinator and professors. Finally, by 3:30pm the students took a group photo with the Manvaasam team. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator, Ms. S. Sangeetha and the Dean of Student Affairs, Dr. V. Jamuna of Jerusalem College of Engineering. The students left the Database Management lab with newly gained knowledge and a feeling of satisfaction.

HANDS-ON WORKSHOP

5. Web Development-IT (24.11.2022)



ISTE Student Chapter of JCE organized a "Hands-on Workshop on Web Development" for all the Second year IT students on 24thNovember 2022.

<u>REPORT</u>

On 24th November 2022, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted a Hands-on workshop on "Web development" for the ISTE members from II-year IT department of Jerusalem College of Engineering at the SD lab. By 9:30 am the event started with an opening ceremony graced by the Resource person Mr. Karthick Arumugam (Software developer at Manvaasam, Thirupattur) and his team, Dean of Student Affairs and the HoD of IT Department of the college. After the opening ceremony, the session was handed over to the resource person and the hands-on workshop began. The resource person started by grouping the students into teams so that they can compete in a friendly way by completing various tasks and enjoys what they learn. He then proceeded by explaining the basic elements of web development, front end and back end and the basic software needed to develop a website. After completing the basic introductions, the resource person proceeded to teach the students on how to customize the predefined code to make their own personal website. The student teams followed their instructions keenly and proceeded with the workshop. The team of Manvaasam gave attention to all the students. If any team faced difficulty in proceeding further, the Manvaasam team approached them and cleared all their doubts personally. By 12:00 pm, the students were given their lunch break. The students had their lunch and then the session resumed by 1:00 pm. The resource person proceeded to teach in detail. By 3:00 pm the resource person started to conclude the workshop by summarizing everything the students learnt that day and gave many examples of where those concepts can be implemented in real life. The workshop was filled with practical first-hand learning. The workshop came to an end by 3:20 pm. The proceedings of the workshop were witnessed by the Dean of Student Affairs, HoD of S&H department, ISTE coordinator and professors. The closing of the workshop was done with a little ceremony including the feedback of the students and a vote of thanks. The closing ceremony was graced by the Manvaasam team, Dean of Student Affairs, ISTE coordinator and professors. Finally, by 3:30pm the students took a group photo with the Manvaasam team. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator, Ms. S. Sangeetha and the Dean of Student Affairs, Dr. V. Jamuna of Jerusalem College of Engineering. The students left the Software Development lab with newly gained knowledge and with a feeling of satisfaction.



6. Arduino Programming- II EEE (10.02.2023)

ISTE Student Chapter of JCE 14organized a "Hands-on Workshop on Arduino Programming" for all the Second year EEE students on 10thFebruary 2023.

<u>REPORT</u>

On 10thFebruary 2023, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted a Hands-on workshop on "Arduino Programming" for the ISTE members from II-year EEE department of Jerusalem College of Engineering at the Power System Simulation lab. By

9:30 am the event started with an opening ceremony graced by the Resource person Mr.K. Mathivanan (Technical Lead at SigeTech Embedded and Robotics Solution Pvt Ltd) and his team, Dean of Student Affairs, the HoD of EEE Department, the HoD of S&H Department and the EEE professors of the college. After the opening ceremony, the session was handed over to the resource person and the hands-on workshop began. The session started by grouping the students into teams so that they can work as a team complete every task. He then proceeded by explaining what are the basic elements of Arduino programming, the hardware components and the software components. After completing the basic introductions, the resource person proceeded to teach the students how to customize their Arduino boards by first implementing it in a simulator and then doing it in the hardware given to each team. The student teams followed their instructions keenly and proceeded with the workshop. The team of SigeTech gave attention to all the students. If any team faced difficulty in proceeding further, the SigeTech team approached them and cleared all their doubts personally. By 12:00 pm, the students were given their lunch break. The students had their lunch and then the session resumed by 1:00 pm. The resource person proceeded to teach in detail. The students showed their own creative outputs for every mechanism the resource person thought them. By 2:50 pm the resource person started to conclude the workshop by summarizing everything the students learnt that day and motivated them to learn more about Arduino and told that it is not necessary to have the hardware to learn Arduino programming and the students can learn by using simulators first, this caught the students attention. The workshop was filled with practical first-hand learning. The workshop came to an end by 3:20 pm. The proceedings of the workshop were witnessed by the Dean of Student Affairs, HoD of S&H department, ISTE coordinator and EEE professors. The closing of the workshop was done with a little ceremony including the feedback of the students and a vote of thanks. The closing ceremony was graced by the SigeTech team, ISTE coordinator and EEE professors. Finally, by 3:30pm the students took a group photo with the SigeTech team. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator, Ms. S. Sangeetha and the Dean of Student Affairs, Dr. V. Jamuna of Jerusalem College of Engineering. The students left the Power System Simulation lab with newly gained knowledge and with a feeling of satisfaction.

7. Robotics-II ECE (03.03.2023)



ISTE Student Chapter of JCE organized a "Hands-on Workshop on Robotics " for all the Second year ECE students on 3rdMarch 2023.

REPORT

On 3rd March 2023, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted a Hands-on workshop on "Robotics" for the ISTE members from II-year ECE department of Jerusalem College of Engineering at the Power System Simulation lab. By 9:30 am the event started with an opening ceremony graced by the Resource person Mr. K. Mathivanan and his team (Technical Lead at SigeTech Embedded and Robotics Solution Pvt Ltd), Dean of Student Affairs, the HoD of ECE Department, the HoD of S&H Department and the ECE professors of the college. After

the opening ceremony, the session was handed over to the resource person and the hands-on workshop began. The session started by grouping the students into teams so that they can work as a team complete every task. Hetaughtthe studentshowtouse theArduinoUnoboard in simulation as well as in real time practice. The explanations included showed the SigeTech's robotmodels, some of which arecolour-deduction robot and shape-shifting robot. They preceded to teach about the working of the robots in detail, for instance, the Shape-shifting robotcan be controlled using mobile phone alsoand the colour-deductionrobot deducts the colour yellowthen move towards the object andtouchesit. The team proceeded to teach using video aids. They also enlightened the students about serial monitors, Analog sound control usingbuzzer and IR sensor. The student teams followed their instructions keenly and proceeded with the workshop. The team of SigeTech gave attention to all the students. If any team faced difficulty in proceeding further, the SigeTech team approached them and cleared all their doubts personally. By 12:00 pm, the students were given their lunch break. The students had their lunch and then the session resumed by 1:00 pm. The resource person proceeded to teach in detail. The students showed their own creative outputs for every mechanism the resource person thought them. By 2:50 pm the resource person started to conclude the workshop by summarizing everything the students learnt that day and motivated them to learn more about Robotics. The workshop was filled with practical first-hand learning. The workshop came to an end by 3:20 pm. The proceedings of the workshop were witnessed by the Dean of Student Affairs, HoD of S&H department, ISTE coordinator and ECE professors. The closing of the workshop was done with a little ceremony including the feedback of the students and a vote of thanks. The closing ceremony was graced by the SigeTech team, ISTE coordinator and ECE professors. Finally, by 3:30pm the students took a group photo with the SigeTech team. The program was organized by the ISTE Student Chapter Members overseen by the ISTE coordinator, Ms. S. Sangeetha and the Dean of Student Affairs, Dr. V. Jamuna of Jerusalem College of Engineering. The students left workshop with newly gained knowledge and with a feeling of satisfaction.



8. Physiological Data Acquisition and Analysis- II BME (10.03.2023)

ISTE Student Chapter of JCE organized a "Hands-on Workshop on Physiological Data Acquisition and Analysis" for all the Second year BME students on 10thMarch 2023.

REPORT

On 10th March 2023, ISTE Student Chapter of Jerusalem College of Engineering, Chennai, conducted a Hands-on workshop on "Physiological data Acquisition and Analysis" for the ISTE members for II-year BME students of Jerusalem College of Engineering. By 9:30am the event started with an opening ceremony graced by the Resource person Dr.K.Baskaran (Biomedical Engineer and South regional manager, Gentech Marketing and Distribution Pvt Ltd), Dean - Student Affairs, HoD of BME Department, HoD of S&H Department, the ISTE coordinator and the BME professors of the college. After the opening ceremony, the session was handed over to the resource person and the hands-on workshop began. The resource person began by first teaching the students the theoretical concepts about ECG, EMG, heart rate, pulse rate and then proceeded with the practical implementations. The students were thought how to use the PC plug-in data acquisition (DAQ) board efficiently in their field. Then he proceeded by calling upon few volunteers to demonstrate real time use-age of the equipment, which involved connecting the device to the volunteers and then projecting the output (ECG, EMG, etc.). The resource person also taught the students about a new technology which will be useful for physically challenged and older people. He further explained that this new equipment has the ability to analysis the user's entire body and display the output through the user's phone that is connected to the device through means of Bluetooth. If any student faced difficulty in understanding the concept, Dr.K.Bhaskaran approached them and cleared all their doubts without any hesitation. By 12:00 pm, the students were given their lunch break. The students had their lunch and then the session resumed by 1:00 pm. The resource person proceeded to teach in detail. The students showed their own creative outputs for every mechanism the resource person thought them. By 2:50 pm the resource person started to conclude the workshop by summarizing everything the students learnt that day and motivated them to learn more about Physiological data Acquisition and Analysis. The workshop was filled with practical first-hand learning. The workshop came to an end by 3:20 pm. The proceedings of the workshop were witnessed by the Dean of Student Affairs, HoD of S&H department, ISTE coordinator and the BME professors. The closing of the workshop was done with a little ceremony including the feedback of the students and a vote of thanks. The closing ceremony was graced by the resource person Dr.K.Baskaran, Dean - Student Affairs of JCE, HoD of BME department and the ISTE coordinator. Finally, by 3:30pm the students took a group photo with the resource person. The program was organized by the ISTE Student Chapter Members overseen by the Dean of Student Affairs and the ISTE coordinator, of Jerusalem College of Engineering. The students left workshop with newly gained knowledge and with a feeling of satisfaction.

S.NO	DESIGNATION	INCHARGES
1	Convenor	Dr. V. Jamuna
2	Coordinator	Ms. S. Sangeetha
3	Faculty Advisor	Dr. John Jebarathinam
4	Chairperson	Nishanthi. M (ECE)

OFFICE BEARERS- 2022-23

5	Members	 Nivetha. K (CSE A) Syed Tamim Mehdi (CSE B) Harini. S (EEE) Vaishnavi Kumari (CS & BS) Jaladhija. S (IT) Angelin Jerisha S (BME) Haumrish .V .S (AI&DS) Rifa Fathima S (AI&ML) Om Shree Gyanaraj (Cyber Security)