IT4010

Research Project Workshop

RP Team

- Dr. Jayantha Amararachchi
- Dr. Dilshan De Silva
- Mr. Thusithanjana Thilakarathne
- Ms. Chathurangika Kahandawaarachchi
- Mr. Kavinga Yapa
- Ms. Shashika Lokuliyana
- Mr. Didula Chamara
- Ms. Vindya Kalapuge



Faculty of Computing









Brainstorming Workshop - 2023

RPTeam

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Dr. Jayantha Amararachchi

RP Team

Faculty of Computing – IT, CSE, CSSE

RP Coordinator

Academic Staff



Dr. Dilshan De Silva



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Mr. Kavinga Yapa



Ms. Shashika Lokuliyana



Mr. Didula Chamara



Ms. Vindya Kalapuge



Mr. Tharaniyawar ma



Ms. Koshila Muthumali



Administration Staff

Ms. Cheshani Peris



Ms. Hasini Rangana

Module Details

- Module Code: IT4010
- Credits : **16**
- Duration : 2 Semesters
- course web page :

Research Project (Comprehensive Design and Analysis Project) - IT4010 [2024/JUL]

Enrollment key: RP24-25J

Why Project is important?

Converts theories to practical in the real world

Enhances your practical knowledge to meet industry requirements

Improves your teamwork

Helps to improve your research abilities

Helps to identify Benchmark your level with the industry standards

Learning Outcomes

At the end of the module student will be able to:

- LO1: Provide a creative and innovative solution to an open-ended complex problem
- LO2: Apply the **key pillars** of the domain of computing
- LO3: Apply project management methodologies to provide a solution to an open-ended problem using appropriate techniques, tools, best practices, and standards, in the ethical, security, social, legal and professional context.
- LO4: **Communicate effectively** with a wide range of audiences including both technical and non-technical stakeholders.
- LO5: Assess the **commercial viability** of a project.



Forming Groups...

Not more than 4 members in a Group

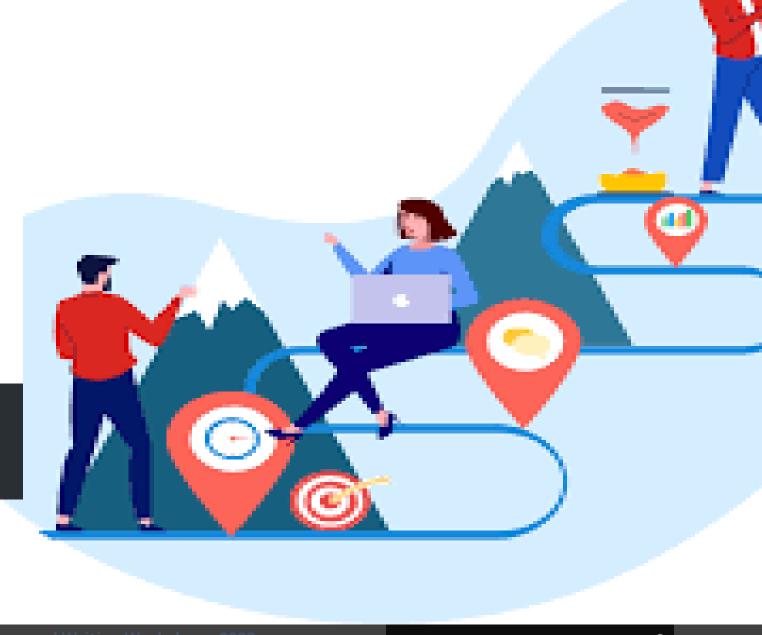
Irrespective of gender but from the same stream of study

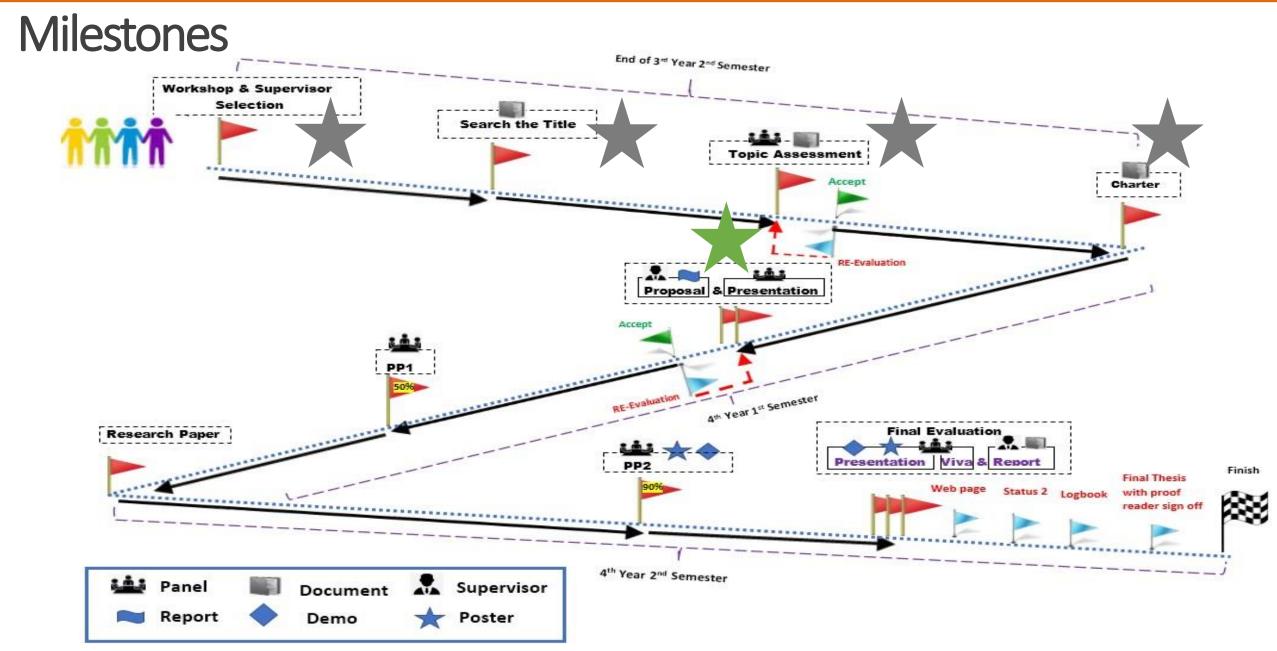
With common interest in the Project

With diversity of backgrounds and ideas

Beware, members you like, may not share same interest in the Project

Milestones





Assessments



Supervisor Level Assessments

Proposal report, Project status document 1 & 2 and Research logbook, Final Report



Panel Level Assessments



Proposal Presentation, Progress
Presentation 1 & 2, Research paper, Final presentation & Viva

Tentative Timeline



Assessment Schedule

| Proposal Presentation | - 6% |
|-------------------------------|-------|
| Proposal Report | - 6% |
| Progress Presentation-1(50%) | - 15% |
| Progress Presentation-2 (90%) | - 18% |
| Final Report | - 15% |
| Final Report (group) | - 4% |
| Final presentation | - 10% |
| Viva | - 10% |
| Website | - 2% |
| Research paper | - 10% |
| Progress Reports | - 2% |
| Logbook | - 2% |



Ways of communication







Can meet any RP team member with a prior appointment.



Can directly contact the LIC/Coordinator by writing to

All information posted to the course web and Students are required to check it regularly.

Jayantha Amararachchi jayantha.a@sliit.lk

Course web page: Research Project (Comprehensive Design and Analysis Project) - IT4010 [2025/JUL] Enrollment Key: RP24-25J



Modes of evaluation











PANEL-BASED

SUPERVISOR-BASED

DOCUMENT-BASED

DEMONSTRATIONS

RESEARCH PAPER







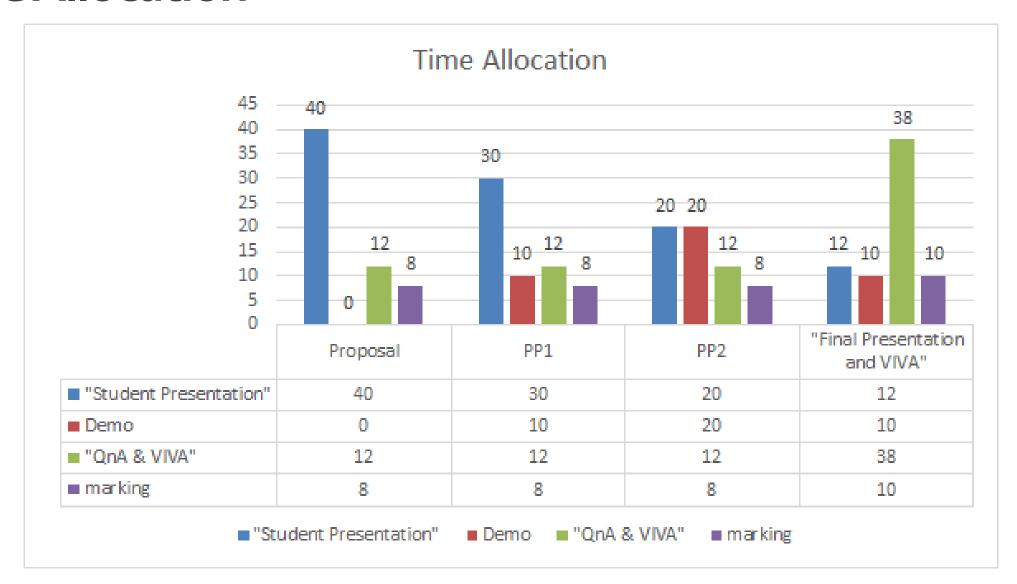
POSTER

INDIVIDUAL VIVAS

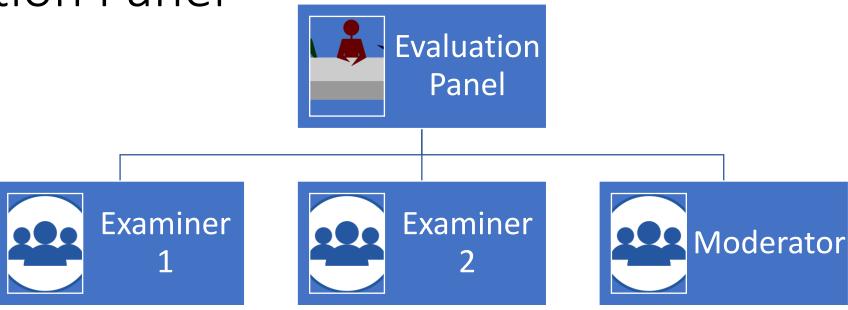
INDIVIDUAL PRESENTATIONS



Time Allocation



Evaluation Panel



- They use the same marking rubric (available in the Course web) to assess all groups
- Your supervisor is not a member of the panel

Composition of a Presentation panel

Examiner 1

- Provide Individual marks
- Asses the project

Examiner 2

- Provide individual marks
- Asses the project

Moderator

- Moderate the marks
- Lead the panel
- Incase of the supervisor is one of the panel members, the supervisors will be completely silent member.

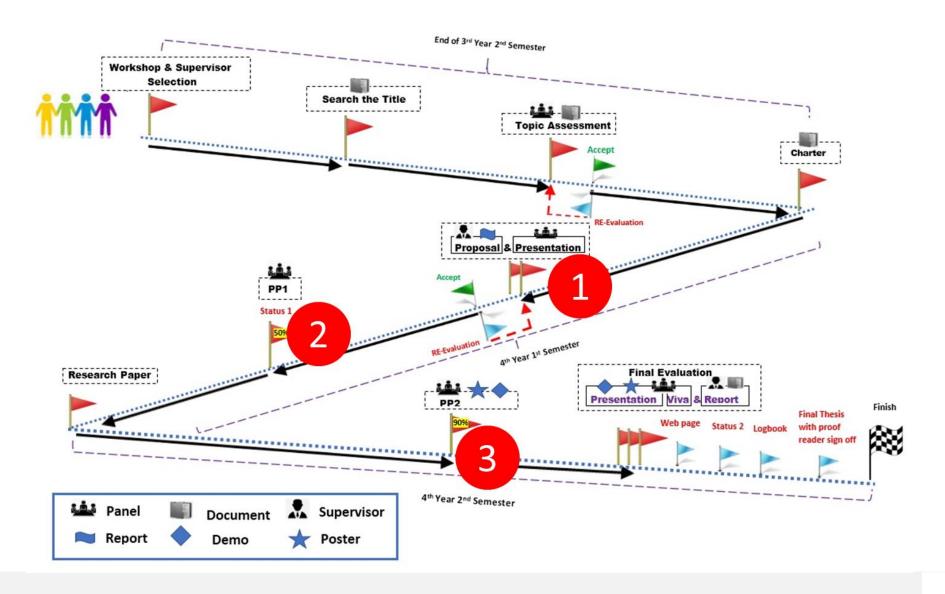
Brainstorming Workshop - 2023

How marks are given in each assignment

- Predefined rubrics are used.
- All rubrics will be available in your allocated cloud space.
- Examiner 1 and Examiner 2 give individual marks, and the marks will be moderated.
- Each Student will be evaluated individually.

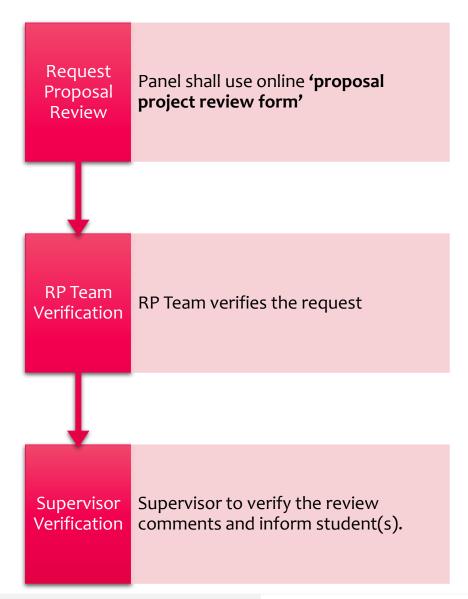
| Student ID: | | | | | |
|--|---|--|--|---|--------------------------|
| Sub Assessment Criteria | Excellent (100 - 75) | Good (74 - 60) | Average (59 - 40) | Below Avg. (39 - 0) | Marks [Out of 100] |
| | Proven gap/Cr | eative Solution [Based on l | LO1] - [35%] | | |
| Knowledge gap (Problem) with novel and creative solution 70% | Clearly argued the existence of knowledge gap using credible, multiple sources. Excellent justification for novelty and creativity. | Sufficiently argued the existence of knowledge gap using limited sources. Good justification for novelty and creativity. | Moderately argued the knowledge gap with very few or no sources. Average justification for novelty and creativity. | Knowledge gap is not clearly identified. Poor or No justification for novelty and creativity. | |
| 2.Compare existing systems and related work 30% | Extensively compared the research problem in the present context of the research domain / with similar products and services. | Sufficiently compared the research problem in the present context of the research domain / with similar products and services. | Moderately compared the research problem in the present context of the research domain / with similar products and services | Poorly compared or No comparison has been done | |
| | | | | | |
| | | ying the knowledge in parti | cular stream [Based on Lo | 02] - [30%] | |
| Application of key pillars in the specialized area of knowledge 50% | Clearly identified the most appropriate research area (Machine learning, Image processing, Data Science etc.) | Satisfactorily identified the research area. | Vaguely identified. But appropriateness is doubtful. | Indistinctly identified or Not identified. | |
| Application of technologies in the relevant key pillar/area 50% | Demonstrated full awareness of technologies in the relevant area and a critical evaluation of technologies proving selection of the best technology/s. | Adequate awareness of technologies to be used and a good evaluation of technologies proving selection of the best technologies. | Moderate awareness of technologies to be used. | Poor or Zero awareness of technologies to be used. | |

RP Proposal Review & Warning Letter Procedure



1. Issuing Warning Letters during Proposal Review Procedure

- During the Panel Evaluation an online form will be made available to the panel to initiate the process.
- RP Team will independently verify the review request and communicate to the supervisor.
- Supervisor will verify and inform respective student(s).



How to submit the project deliverables

Upload the Information to the RP Cloud Store

| es / 20 | 20 REGULAR > 2020-001-Student | S & | | | |
|-----------|--------------------------------------|-----------------|--------------------|------------------|-----------------------|
| | Name 💛 | Modified \vee | Modified By \vee | File size \vee | Sharing |
| <u>_8</u> | 1. Project Proposal | February 7 | CDAP SLIIT | 2 items | ^R Sharec |
| 8 | 2. Status Document 1 | February 7 | CDAP SLIIT | 2 items | ۶ ^۹ Shared |
| 8 | 3. Progress Presentation - 1 | February 7 | CDAP SLIIT | 1 item | ۶ ^۸ Shared |
| 8 | 4. Research Paper | February 7 | CDAP SLIIT | 2 items | ۶ ^۹ Sharec |
| 8 | 5. Progress Presentation - 2 | February 7 | CDAP SLIIT | 2 items | ۶ ^۹ Sharec |
| 8 | 6. Final Report & Presentation | February 7 | CDAP SLIIT | 2 items | ۶ ^۸ Shared |
| 8 | 7. Status Document 2 | February 7 | CDAP SLIIT | 0 items | ۶ ^۹ Shared |
| 8 | 8. Website | February 7 | CDAP SLIIT | 0 items | ని Shared |
| 8 | Marking Schemes | February 7 | CDAP SLIIT | 8 items | ్లీ Sharec |
| 2 | Project Registration Documents | February 7 | CDAP SLIIT | 5 items | ۶ ^۹ Shared |

Projects should be registered with "my.sliit.lk" accounts

Weekly Workshops

The students must participate the RP workshops.

There will be special sessions organized by the RP team as a help to the project deliverables.

Individual LogBook report should maintain and enter details daily.

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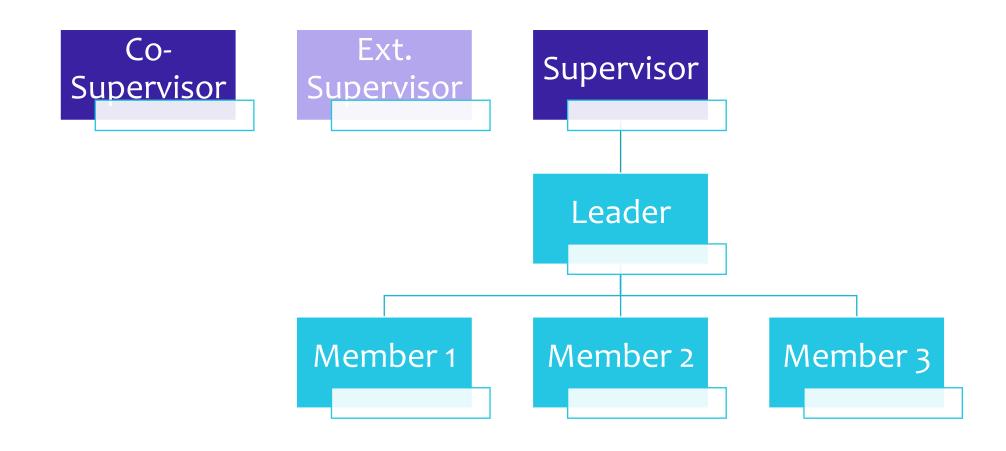
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| Action | Responsibility | Date and Time |
|---|----------------|---------------|
| Form your Project Group and find a supervisor | Students | open |
| Online Project Group Registration | Students | 19 April 2024 |
| Publish temporary Project IDs through the course web | RP Team | 9 May 2024 |
| Upload Supervisor Signed Project charter Forms (online) | Students | 24 May 2024 |
| Project registration and creation of main DB | RP Team | 15 July 2024 |

A Project Group



FoC Research Groups

- Every staff member belong to a Research Group as well as an assessment panel.
- A group of students must align with a supervisor who belongs to the same stream and the research area.
- The panel of experts for oral evaluations will also assign based on the selected research group

In the Topic Assessment, you will get a result as follows:

| | Correction State | | |
|--------------------------|--|--|--|
| Acceptance/ Rejection | Minor Correction | Major Corrections | |
| Accepted | You can continue to the charter by addressing the comments | You can continue to the charter with the consultation with your supervisor | |
| Resubmit | resubmit the topic assessment form (with the scan copy of old one) to the cloud drive. | You may consult your even supervisor (and go for a new topic.) | |
| Rejected | You MUST re-submit with a new topic | | |

Students Secured So Far...

- NBQSA bronze award in 2004
- NBQSA merit award in 2006
- NBQSA Gold, Silver & Merit awards in 2007
- Microsoft awards in 2007
- APICTA Gold award in 2007 (Held in Singapore)
- Imagine cup Silver award in 2007
- NBQSA Gold & Merit awards in 2008
- Microsoft awards in 2008
- APICTA 2nd place in 2008 (Held in Indonesia)
- ISACA Gold awards in 2008
- Imagine Cup Silver award in 2008
- Imagine Cup Gold award in 2009
- NBQSA 4 Merit awards in 2009
- NBQSA Silver & 2 Merit awards in 2010
- NBQSA Silver & other 6 awards in 2011
- NBQSA 2 Merit awards in 2012
- NBQSA Gold & Silver awards in 2013

- NBQSA Gold & Silver awards in 2013
- APICTA Merit award in 2013 (Held in Hong Kong)
- NBQSA Gold, Bronze and Merit awards in 2014
- APICTA Merit awards in 2014 (Held in Indonesia)
- e-Swabhimani Gold award in 2014
- NBQSA Silver and two Merit awards in 2015
- NBQSA Gold, Silver and Merit Awards in 2016
- NBQSA Gold, Silver and Merit Awards in 2017
- NBQSA BRONZE and 6 Merit Awards in 2018
- SLIoT Challenge Gold Award
- NBQSA 2019 Silver for Business Category and Bronze for Technological Category and 2 merit awards
- Merit award University of Moratuwa IEEE EMBS Student Branch Chapter, 2019
- Champions, IEEE WIE Sri Lanka Section
- Wining Circle NBQSA 2020
- Winer e-Swabhimani 2020 Youth Award
- Winer e-Swabhimani 2020 Health & well-being

- Wining Circle NBQSA 2021
- Wining Circle e-Swabhimani 2021



World Summit Award 2020

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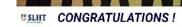




















Best of the Best















RPTeam







NBQSA Awards 2019 සම්මාන උළෙලේදී නවකකරණ ICT වනාපෘති පුදර්ශනය කළ SLIIT සිසුන්ට ජයගුනණ රැසක්

මෙරට පුම්බතම උසත් අධ්‍යාපන ආයතනය වන SLITT උසත් අධ්‍යාපන ආයතනගේ පරිකණක පීඨයේ අවසාන වසර සිසුන් පසුගියදා සිය දක්කත එළිදක්වමින් National Best Quality ICT Awards 2019 (NBQSA) සම්මාන උළෙලේදී සම්මාන රසක් දිනා ගනීමින් ජයකුගනයන්ගේ එකුතුව එක්වීමට සමක් විය. එළිදී SLITT කණ්ඩායම් සාති්රික ව්‍යාපයේ පවසෙන් ඉයේ වෙනුවෙන් වී දී සම්මානයක් තක්ෂණික ආයේ වෙනුවෙන් ලේකඩ් සම්මානයක් දිනා කෝණ්ඩ

ශ්‍රී ලංකා වරදක් තොරතුරු තාක්ෂණ අයකතය සිරිය මිනින් සේවිතාන කරන ලද මෙම සම්මාන උළෙද වසර 21ක් පුර වාර්මිකව පවත්වනු ලබයි. එහිදී උසස් තාත්ත්වයේ තොරතුරු හා සාත්තිවේදන නාක්ෂණ නිෂ්පාදන නිපදවා ඇති ශ්‍රී ලංකාවේ වීවිට පුද්ගලයන් සහ සංවිධානවල විශීම්වත්වය ඇතුම්වල උස් කෙරේ.

SLIIT පිසුන් ලැබූ මෙම ජයලාගේ පිළිබඳ අයක් දක්වමින් SLIIT පරිගණක පියමේ පියාධිපති මහාචාර්ය පන්දිමාල් ජයවර්ධන මහතා මෙසේ පැවසිය SLIIT හිදී අපි නිරාත්රයෙන් නව නිපැලම නසා රජයේණ මෙන්ම කාචර්ධනය කිරීම පිළිබඳ දරිකණ කිරීම සිදුකරනවා. එමෙන් පිසුන්ගේ වෘත්තීය ජීවිතය ආරම්භ කරන විට එයින් ලැබෙන තරිබලය සහතික කිරීමට

සහ ඔවුන් ජීවත් වන පුජාවන් කෙරෙහි පුළුල් සච්න්ත සහ සංවේදිභාවයක් වර්ධනය කරනු ලබනවා." SLIIT හි

සම්මාන උළෙලේදී S.HIT හි 'Crop Medic Plus' සක්වාරය ඉදිරිපත් සරක ලද මෝවේල රෝග ඉදහාලේකි සහ රෝග වනරේසිය පුරෝකරනය කිරීමේ සාකිරීමට සාකිරීමට සම්බන්ධ වනරාතිය සඳහා ලෝකර සම්මානය දිනාගත් අතර ඔවුන් වියර්තාමයේ පැවති 19 වන Asia Pacific ICT Alliance, මේමාන උළෙලර සහභාග වීමේ වරම් ලබිමින් එහිද කළඳහා සම්මානයක් දිනාගැනීමට පමණ්ඩා. ඒ අදහා සංස්ථායම් අධ්‍යත්ත වශයෙන් ආචාර්ය ජනත විරේමකත්ත්, සම අධ්‍යත්ත වර්ගයෙන් ආචාර්ය ජනත විරේමකත්ත්, සම අධ්‍යත්ත ආචාර්ය ලක්ත නාවන්න සහ අවර්ත සහ ආචාර්ය ලක්ත නාවන්න සහ අධ්‍යත්ත ආචාර්ය ලක්ත නාවන්න සහ

edic කෙරුණු වෙබ් ආරක්ෂණ හැසිරවීමේ සහ අනවසර ආකුමණ හඳුනාගැනීම සහ කෝටා කළමනාකරණ කස්ධික වශාගණිය සදහා රිදී සම්මානය ජයාහරණය කළේය. මෙම කණ්ඩායම අම්ල කුවත් සේනාරක්ක මහතා අධික්ෂය කළ ICT අත සැත් අමරතුංග, මනුල උඩුගහරක්කුව, මෙ නාල් රොස්ල් සහ චමාලි උත්තරා කණ්ඩායම

> කවද "මෝටර් රට සහ වාහන කොටස් සොරකම් අනාවරණය කිරීමේ පද්ධතියක් වැඩි දියුණු කිරීමේ සෘතීයික ICT වාහපෘති සඳහා කුසලනා සම්මානයක් හිමිකර ගැනීමට SLIIT කණ්ඩායමක් සමත් විය. මෙම කණ්ඩායමේ

වේන්ත සහභාගි වූහ. අධීක්ෂකවරයා ලෙස ආචාර්ය අනුරාධ ජයකොඩි SLITT හි 'Dynamic Defender' නමින් නම් මහතා පත් වූ අතර සාමාජිකයන් අතර එන්.

මනතා පත් වූ අතර සාමාජිකයන් අතර එනි. එක්.මී, ලියනගේ, ජේ.ඒමේ එක්.මී. අපරේවරයා, නිකේද් දී ස්ල්වා සහ භාගත් විමුක්ති නිශ්ශයා සාණ්ඩයම් සාමාජිකයන් ලෙස කටයුතු කළහ. එසේම SLIIT ආයතනය විමිත් නිපැසු කළ "මේදනාවනීක් නොරව (non-invasive) රුවරයේ

ලේ ප්රවර්ග නිර්තිස්සේ කළ හැකි උපකරණයක් විත Diahi Tech සදහා තුස්ලතා සම්භාගයක් දිනාගත් අතර එම කණ්ඩයම අධීක්ෂණය වතුරුගිනා කහදවදාවෙච් මහාණිය විසින් දැරු අතර ඉනුරී උදාර අගත් කතිශික ද ඇලිස් වන්දහා සිල්වා සහ මලිපා අයන්ෂණී ආහත්දී කණ්ඩායමේ සෙසු සාමාරකයන් ලෙස භාගත්දී කණ්ඩායමේ සෙසු සාමාරකයන් ලෙස භාගත්දී කණ්ඩායමේ සෙසු සාමාරකයන් ලෙස



Among 7 universities including computer science undergraduates under different specializations, our ISE undergraduates brought both championship and first runners-up to SLIIT



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25th March 2024



RPTeam







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