

# Annual Report 2021/2022

After 10 years of advancing the knowledge and mindsets of statistics undergraduates, the [Statistics Society](#) of the [University of Sri Jayawardenepura](#) was directed towards a near course under the newly appointed board for the year 2020/2021. From looking outwards to looking inwards, the Statistics society set its mind on the objective of enriching and preparing the students of the [Department of Statistics](#) for the opportunities in the industry for statistics undergraduates. After assuming duties on the 11th of December 2020, the newly appointed board began its quest by answering a question that students had in their minds for a long time, “What do we need to do to prepare ourselves for the industry?”.



The best place to find the path forward is to ask those who have walked the path before us. With that thought in mind, we reached out to the alumni of the Department of Statistics who have established themselves in the field of Data Science, Business Analytics and Finance to organize a panel discussion where the students themselves receive the opportunity to ask the

questions that they have pondered over. [Mr. Shanaka Chathuranga](#), [Mr. Isura Nimalasiri](#), [Ms. Kithmini Pieris](#), [Chamodh Kaveen Perera](#) and [Mr. Dinuka Lokugamage](#) volunteered for the initiative, creating a diverse panel covering several branches of statistics through their professions. And with that, the debut project of the term, “Ask the experts” was born. “Ask the experts” let the students register for the event along with the questions that they were having, with regards to entering different domains in the industry, such as business analysis, finance, data science or data engineering with a statistics background. The project was quite fruitful with a large number of participants and engaging conversations with highly appreciative feedback from the undergraduates on the positive effect it created in planning their careers in the domain that they prefer the most.



Continuing from there onwards, in the journey of equipping undergraduates with demanding skills, the board decided to introduce the students to a novel technological tool much needed in the industry, Git. “The Basics of Git” session was initiated and in this session, [Adithya Narasinghe](#) presented an interactive and engaging presentation which gave the undergraduates

a comprehensive understanding of tackling Git. In addition to data science-oriented tools such as Git, the Statistics Society decided to steer towards enriching the students with advanced knowledge of two tools that they are already familiar with, Microsoft Excel and the Scientific Calculator. Conducted by [Rashmini Rathnaweera](#) and [Theja Sanduni](#), two undergraduates following the Statistics special degree at the Department of Statistics, the webinar brought forward both a refresher for beginners and a walkthrough of advanced methods for seasoned users.

**Git Fundamentals Session**

**THANK YOU FOR JOINING**

CONDUCTED BY  
**ADITHYA NARASINGHE**  
Deep Learning Engineer (labml.ai)  
Consultant Software Engineer (oDoc)

**EXCEL & CALCULATOR WORKSHOP**  
For 1st Year Students

**INTRODUCING OUR SPEAKERS**

**Rashmini Rathnaweera**  
University of Sri Jayewardenepura

**M.D.Theja Sanduni**  
University of Sri Jayewardenepura

25th July 3pm - 5pm Via zoom

**JOIN US**  
And get to know about the tips & tricks you can try on Excel & your calculator!

**STATISTICS SOCIETY**  
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After prepping the students with the knowledge and the tools needed to thrive in the industry as statisticians and data scientists, the next step was to bring out their inner creativity. The Iron Viz competition is organized by the Tableau community annually to encourage data visualization specialists to take on data visualization challenges with novel data. Inspired by Iron Viz, the Statistics Society decided to bring in a data visualization competition for the students of the Department of Statistics. This initiative took the name “Pearl Viz” as Sri Lanka was often referred to as The Pearl of the Indian Ocean. The competition was centred around three themes; Sports, Music, and Movies to bring data visualization closer to the students through an entertaining experience.



#### ENTRY REQUIREMENTS

- An undergraduate of FAS USJ
- Maximum of **04** members for a single team.

#### ROUNDS

##### 1-Preliminary Round

From 8AM on 09th August 2021 to 8AM on 15th August 2021

##### 2-Final Round

05th September 2021

#### AWARDS

1. BEST DASHBOARD PRESENTATION for each focus area.
2. BEST DATA CLEANING PROCESS
3. BEST DATA VISUALIZATION

#### PROCEDURE

- There are 03 focus areas.
- Choose 01 focus area.
- Collect the data you need and create a DASHBOARD & a REPORT.
- From the preliminary round, 03 teams from each focus area will be qualified for the final round.
- The final round will consist of a PRESENTATION to the judges.

#### DATA SOURCES FOR FOCUS AREAS

1. Cricket - Stats Guru
2. Music - Spotify Developer Portal
3. Movies - IMDb

**REGISTRATIONS NOW OPEN!**



## Not so scary things in Pearl Viz

### Mentoring sessions



Mentoring sessions are held to help you solve the problems you have in your data visualization journey by a team of mentors allocated exclusively for your team.

### In competition webinars

Webinars will be held to teach you how to take on a data visualization project for the competition and for the industry.



### Technical helpdesk



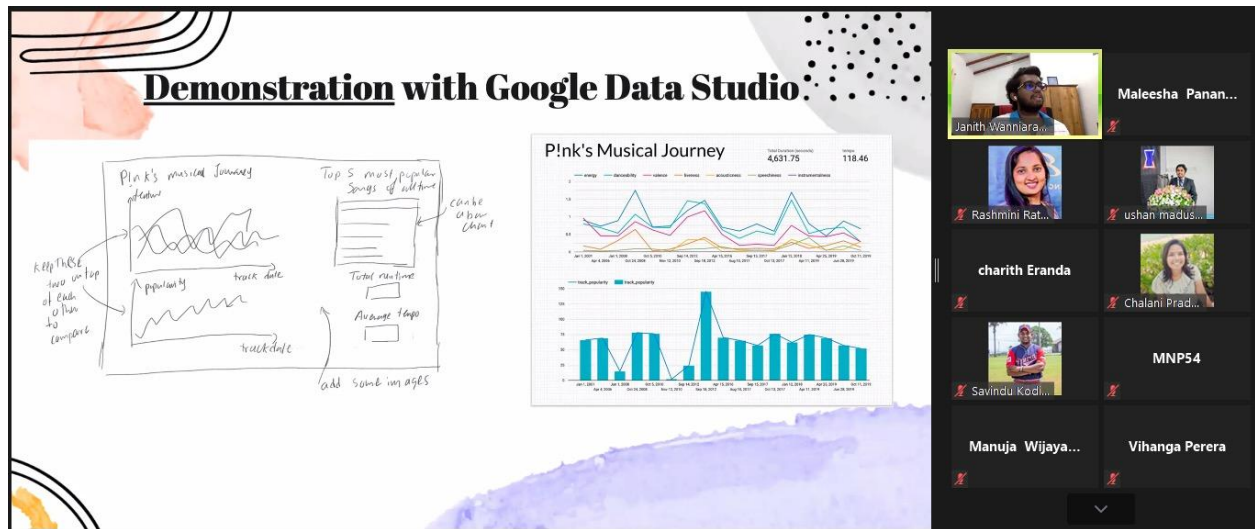
A special technical team dedicated to helping you out with data visualization tools at any time.

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An introductory webinar on the fundamentals of data visualization was brought forward to prep the Pearl viz contestants by discussing the ideation process of building a dashboard and the general guidelines followed in creating a visually appealing dashboard that effectively communicates its insights to the end user. [Janith Wanniarachchi](#), President of the Statistics Society, led the workshop by giving an end-to-end tutorial from sketching the layout to creating the dashboard using Google Data Studio, to encourage students to try out and kick off their dashboarding journey with a beginner-friendly tool. Following the Google Data Studio workshop, the Statistics Society organized another workshop conducted by Janith Wanniarachchi to introduce Tableau, an industry-standard tool used in delivering insights gained from data. Using data on the profitability and reviews of IMDB movies, the audience was engaged in building a simple dashboard with effective visualizations.





At the end of these two workshops, the registration period for the competition was closed, marking the registration of over 40 teams with a maximum of 4 members per team. The Preliminary Round of Pearl Viz '21 kickstarted on the 9th of August, 2021. The teams under each focus area were provided with a data source which could be accessed via software such as R or Python, or collected through “No Code Solutions” such as online tools. To assist the contestants during this stage, a third workshop was conducted by Janith Wanniarachchi on data collecting techniques which covered gathering data from online sources such as APIs and website scraping tools. Finally, with all the teams assigned their relevant themes, the competition began by giving each team an open-ended question under their area of focus, where they had one week to understand the data structure, carry out the data visualization and come up with an engaging story to present their solutions through an informative dashboard using any accessible and shareable tool of their choice. The teams were also required to submit a report explaining the processes they followed for the data visualization, including all data cleaning and data wrangling techniques, along with the story told by their data and the final conclusions. During the week of the data Pearl Viz competition, a troubleshooting session was organized by the technical committee of Pearl Viz to assist the students in resolving any issues they faced during data collection or dashboard building stages.

The Preliminary Round of Pearl Viz concluded successfully on the 15th of August 2021. Among the submissions received, many elaborate dashboards from first-year undergraduates stood out, inspiring their fellow undergraduates who are novices in the data visualization journey. It was truly inspiring to see participants representing all four academic years working together to

convey the best story with their data regardless of their experience in data visualization. However, only a few dashboards will be selected as winners at the end and a judging panel was invited to perform the hardest task in the competition, the judging round. The judges for the competition were [Dr. Rajitha Silva](#) - Senior Lecturer at the Department of Statistics, [Dr. Thiyanga Talagala](#) - Senior Lecturer at the Department of Statistics, [Mr Dinuka Lokugamage](#) - Data Analyst at MAS Holdings (Pvt.) Ltd. and [Ms. Hashani Kumarasinghe](#) - Visiting Lecturer and Senior Data Engineer at Axiata Digital Labs.



At the end of the Pearl Viz week, the dashboards of the competitors were evaluated by the Judges on Data cleaning, Information value, Data Visualization, and Creativity. And while the evaluation process of the preliminary round was underway, the Pearl Viz '21 team added a new spin to the dashboard competition by showcasing the dashboards on the official Facebook page of the Statistics Society creating an opportunity to win the “Most popular dashboard” award. The respective scores for this award were calculated through likes, comments and shares on each dashboard. The amazing response received by this online competition was reflected by a

staggering organic reach of over 30,000 on the [Statistics Society Facebook page](#). The preliminary round evaluation process came to an end as of 9th September and 9 teams, 3 from each focus area advanced to the final round that was held on 12th September.

The finalists were required to present their work done during the preliminary round before the panel of judges, followed by a Q&A session. The winners of all three categories were crowned at Pearl Viz '21 along with three special awards for the "Best data cleaning process", the "Best data visualization" and "The most popular data visualization". After a month of performing and experiencing fascinating data visualizations, Pearl Viz '21 came to a close inducing suspense about the winners who were scheduled to be announced on the 19th of September at Estadistica '21, the Annual Statistics day of the Statistics Society.

Amidst the hustle of Pearl Viz, another project was going underway that encouraged students to use their statistics knowledge to solve real-world problems by writing articles that analysed data and provided statistical insights on a topic of their interest. The Outliers project was developed as an initiative to help students who are intrigued by research but did not have the time, effort or opportunity to commit to a continuous 6 months of research. As a product of the Outliers program, a wide range of articles were released covering various topics such as. [Predicting the playing 11's in ICC World Test Championship Final 2021](#) which was written by [Savindu Kodikara](#), [Charith Eranda](#) and Minindu Karunasena, while [Remember 2012, the supposed year of Doomsday?](#) was written by [Rashmini Rathnaweera](#), [Rashmi Jayasekara](#) and [Chalani Pradeepika](#).

Estadistica, the Annual Statistics Day, is one of the key annual events of the statistics society, which introduces the students to the modern trends in statistics. After conducting a variety of workshops on the industrial component of statistics education, the next step was to focus on the pathway towards academia. Hence, the Statistics Society of the University of Sri Jayewardenepura decided "Statistics in Research" to be the theme for this year's Statistics Day, Estadistica '21. Specifically, the research of both graduates and undergraduates of the Department of Statistics was to be highlighted to align with the overall theme and trajectory of the Statistics Society for the term.



**VIRTUAL STATISTICS WEEK**

Starting from 6<sup>th</sup> September 2021

**Ready to begin your journey towards Estadistica '21?**  
A virtual experience of Statistics in Research...

 **Research tales**  
The series of tales, stunningly narrated by Alumni of the Department of Statistics in the Faculty of Applied Sciences, University of Sri Jayewardenepura.

 **Poll challenge**  
A chance for you to improve your knowledge while having fun and see how statistics influence our lives in every aspect.

A week of revelations to expand your statistical wisdom...

STAY TUNED...

 **STATISTICS SOCIETY**  
University of Sri Jayewardenepura

ESTADISTICA '21

STATISTICS IN RESEARCH

**Researcher of the Day**

**Women's autonomy in household purchasing decision making in Sri Lanka :  
An application of multivariate baseline-Category Logit Model.**

This research was conducted to identify the factors influencing women's autonomy in decision making on major household purchasing and daily household purchasing

**RESEARCH FINDINGS:**

As many researches on gender and household purchasing decision making are sociological as well as descriptive, this study tries to fill the gap with applying a statistical model into the same context.

- ☒ Factors affecting women's autonomy are age, education, husband, residence area and number of children.
- ☒ Increased age, well paid employment and having living children are all positively associated.
- ☒ Highly educated women are more likely to make decisions jointly.



Research by

**Miss Sachiki Chandradasa**  
Analyst at DJ group (Pvt) Ltd

"Being part of the South Asian community, I always witness numerous discrimination against women solely because of their gender, when compared to western countries. I've always been passionate about gender equality and female empowerment. I wanted to direct this passion towards my final year project as well, with the guidance of my supervisor. It was indeed very interesting to learn about this aspect of society through other researches, and being able to apply my own knowledge into understanding women empowerment in Sri Lanka felt truly rewarding to me."

 **STATISTICS SOCIETY**  
University of Sri Jayewardenepura

Leading towards Estadistica '21, a virtual Statistics week took place from the 6th of September to the 11th of September in sync with the data visualization competition "Pearl Viz '21" and the "Outliers" project. During Statistics Week, the Statistics Society organized a poll challenge series to help undergraduates improve their general knowledge while having fun seeing how Statistics influences our lives in every way. Throughout Statistics Week, a poster series centered around the research done by recent graduates of the University of Sri Jayewardenepura was also held. The research work of six graduates from the department of statistics ([Ms. Dovini Jayasinghe](#), [Mr. Hashan Peiris](#), [Mr. Sajana Peiris](#), [Ms. Sachiki Chandradasa](#), [Ms. Jayani Lakshika](#), and [Ms. Sashini Silva](#)) was showcased through inspirational posters depicting what they loved the most about doing research. In addition, two webinars were hosted on the topics; "Journey to building your career as a Biostatistician" and "Demystifying Research: An adventure with Statistics" as part of the virtual statistics week conducted by [Ms. Dilki Jayasinghe](#) and [Dr. Priyanga D. Talagala](#) respectively. Both webinars were equally appreciated with over 100 participants joining in to make engaging conversations with the speakers.

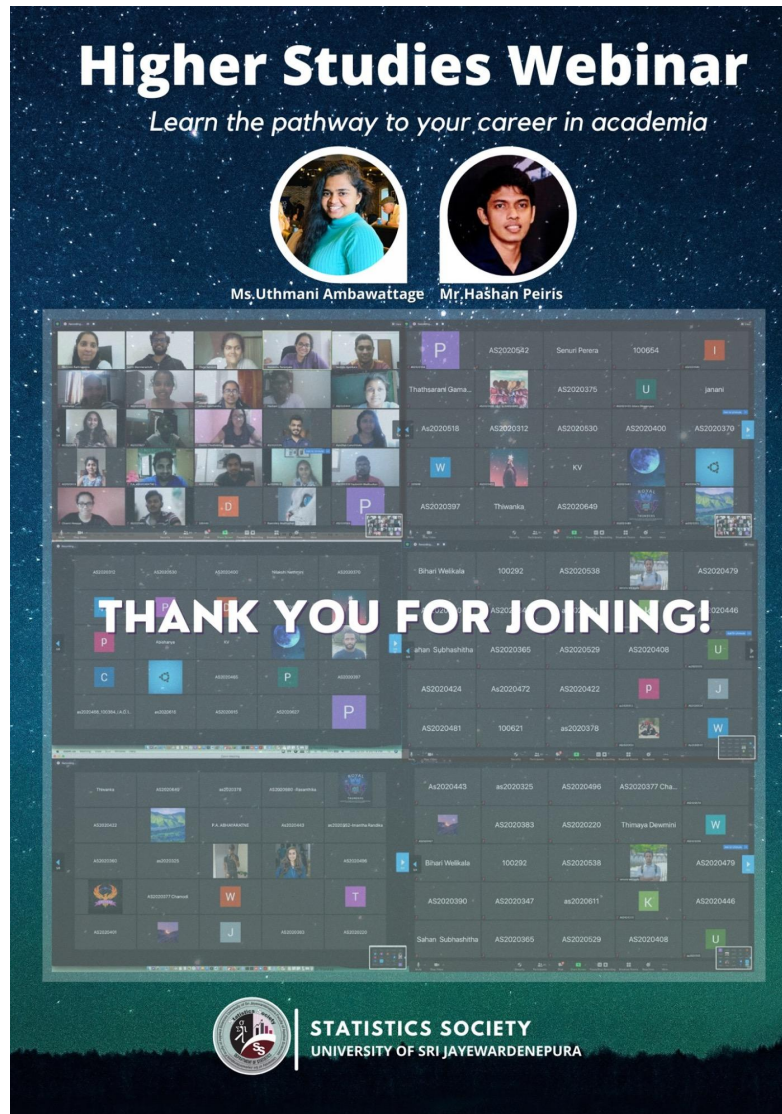




Following the statistics week, undergraduates who were interested in research and academia were probably wondering whether they wanted to move on to higher studies after they graduate. Higher education not only trains a student in their chosen field, but also teaches them how to understand complex subjects, think analytically, and effectively communicate their ideas. They also learn important skills like organization, self-discipline, and how to see a task through from beginning to end. Therefore, as per the idea of Dr. Rajitha M. Silva, the Statistics Society organized "The Higher Studies Webinar". This was specially crafted for the first-year undergraduates of the Faculty of Applied Sciences to motivate them and give them a clear vision of the higher studies path.

The Higher Studies webinar was successfully held on the 12th of September 2021, 06.00 PM onwards via Zoom with over 150 participants who joined to get a clear understanding of how to step into higher studies after their graduation. The speakers of the webinar were [Ms. Uthmani Ambawaththage](#) (MSc student and Graduate teaching assistant at the Department of Mathematics and Statistics, University of Calgary, Canada) and [Mr. Hashan Peiris](#) (MSc student and Graduate teaching assistant at the Department of Statistics and Actuarial Science at Simon Fraser University, Canada) who took an unorthodox strategy in making the session interactive and interesting. The session was started by Ms. Uthmani Ambawaththage by sharing her experiences in her academics and how university undergraduates should prepare for their higher studies. Then Mr. Hashan Peiris shared his experiences and harped on balancing

academics with extracurricular activities. Towards the latter part of the session, participants got a chance to forward their questions to the speakers in the Q and A session and got the opportunity to clarify the doubts they had about studying overseas.



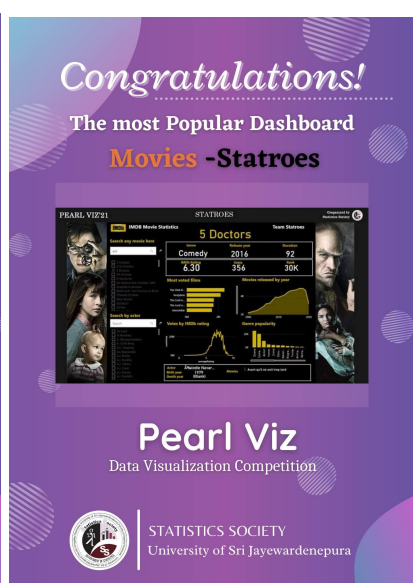
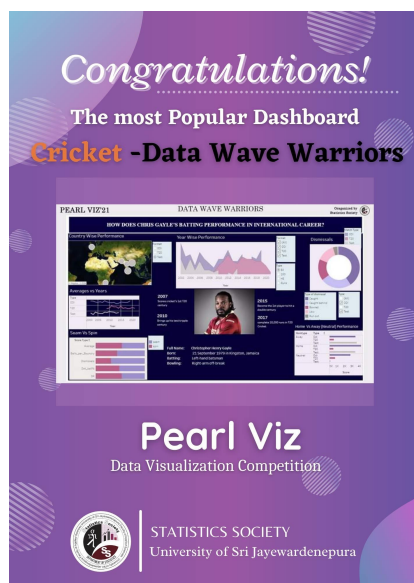
As the final milestone of the virtual Statistics week, the annual Statistics day “Estadística ‘21” was held on 19th September 2021 virtually via the Zoom platform. [Prof. Laleen Karunanayake](#), the Dean of the Faculty of Applied Sciences, the lecturers of the department of statistics of the Faculty of Applied Sciences, the speakers of the webinar series of Estadística ‘21, the judges of the Pearl Viz competition, demonstrators of the Statistics Department graced the event with their

presence while the enthusiastic audience comprised of the graduates and the undergraduates of the University of Sri Jayewardenepura.

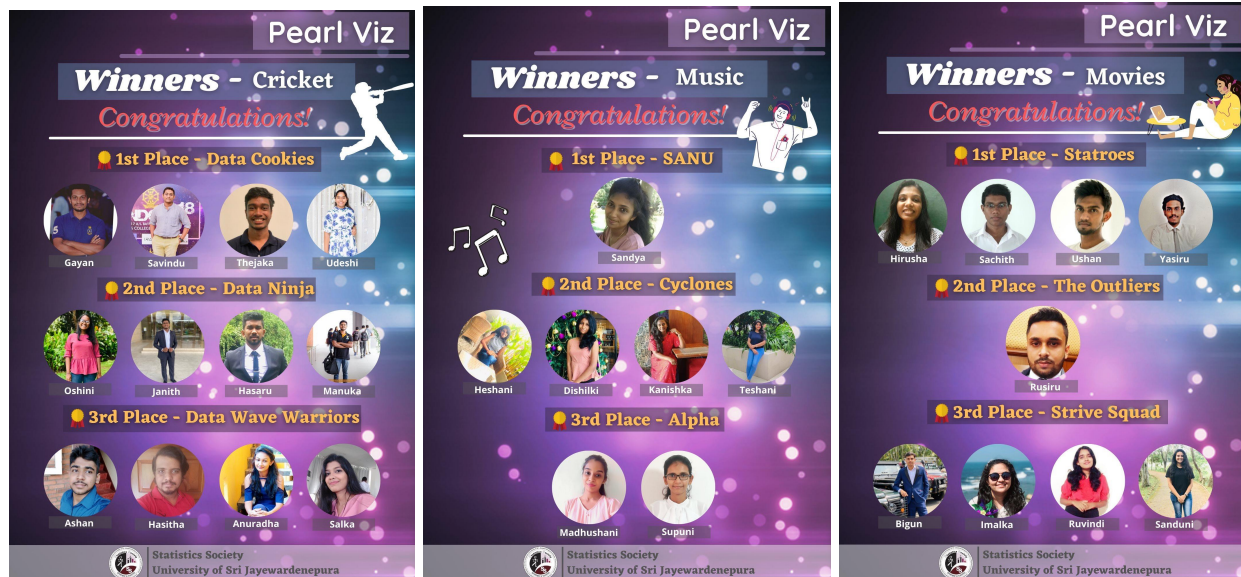
The President of the Statistics society, Mr. Janith Wanniarachchi warmly welcomed everyone to the event which was followed by an event introduction given by [Ms. Thimali Fernando](#), the Chief Organizer of Estadistica '21 to all its participants. The first event of Estadistica '21 was an insightful thesis presentation conducted by [Ms. Sashini Silva](#), Teaching Assistant at the Department of Statistics, the University of Sri Jayewardenepura on the topic of synthetic np charts using Bayesian methodologies.

The Dean of the Faculty of Applied Sciences, [Prof. Laleen Karunanayake](#) addressed the virtual gathering and shared his good wishes to the members of the Statistics Society and everyone who contributed to giving life to Estadistica '21.

Then the most awaited moment of Estadistica '21, announcing the winners of the Pearl Viz competition dawned. The overall winners of the [Cricket](#), [Music](#) and [Movies](#) categories, the winners of the [Best Data Visualization](#), [Best Data Cleaning](#) award and the Most Popular Dashboard under the themes of [Cricket](#), [Music](#), and [Movies](#) themes were announced by Mr. [Ushan Madushanka](#) and Ms. [Ishani Upatharitha](#) on behalf of the organizing committee of Pearl Viz '21.





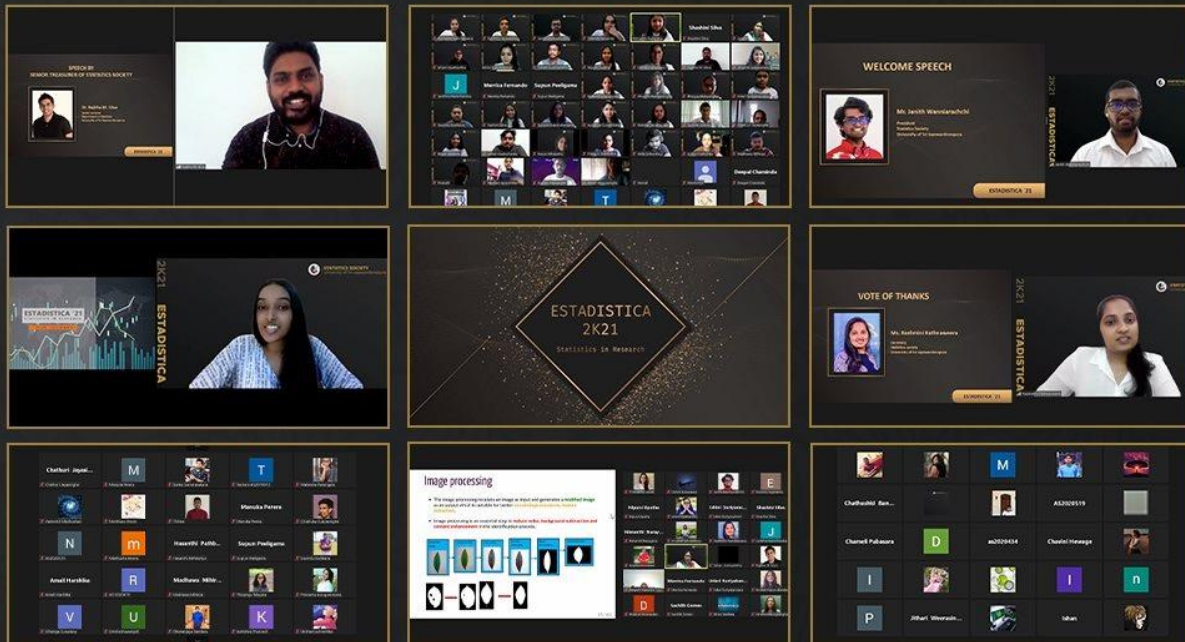


Following the revelation of the winners of Pearl Viz '21 the second thesis presentation was conducted by [Ms. Jayani Lakshika](#), Teaching Assistant at the Department of Statistics, the University of Sri Jayewardenepura on the topic of medicinal leaf image classification using interpretable features. Subsequently, Dr. Rajitha M. Silva, Senior Treasurer of the Statistics Society shared his thoughts on the journey the society has gone throughout the years. Thereafter Ms. Anjana Senadeera, [Ms. Jinushki Saluwadana](#), and [Ms. Janithra Harischandra](#) shared their experiences on the Outliers project, an ongoing Statistical article writing project initiated by the Statistics Society. Afterwards, Ms. Rashmini Rathnaweera marked the end of Estadistica '21 delivering the vote of thanks, thanking everyone for their immense support given to make the event memorable and successful. The most anticipated and exciting event conducted by the Statistics Society of the University of Sri Jayewardenepura, the Annual Statistics Day, Estadistica '21 was concluded with utmost success on 19th September 2021.

# ESTADISTICA 2K21

STATISTICS IN RESEARCH

## THE ANNUAL STATISTICS DAY



**THANK YOU!**  
**FOR YOUR PARTICIPATION.**



**STATISTICS SOCIETY**

University of Sri Jayewardenepura

While the hype of the Estadistica '21 slowly ebbed away, the Statistics Society received another wonderful opportunity to collaborate with a prestigious organization for scientific research in Sri Lanka. In collaboration with the Statistics Society of the University of Sri Jayewardenepura, the Sri Lanka Association for Advancement of Science organized a webinar on "Mobile Health and Digital Technologies for Cardiovascular Disease Data Collection" conducted by [Dr. Chathurangi Pathiravasan](#), Postdoctoral Associate at Department of Biostatistics, School of Public Health, Boston University on the 10th of March 2022. In this webinar, she unfolded her story of how an existing data collection was transformed to gather data digitally through mobile technologies



As the Statistics Society entered the end of its term, a rekindling of the desire and drive for higher studies was necessary to pass the baton on to the following batch. The thinking process of a recent Statistics graduate would likely go along the lines of “now that I’ve completed my bachelor’s, do I apply for higher studies and pursue an academic career or do I join headfirst to the workforce?”. However, being presented with multiple crossroads can be daunting at times. Therefore educating them on what to expect when applying for higher studies can help shed some light on untangling the uncertainty of their prospects. With this objective in mind, the [Statistics Society](#) of the [University of Sri Jayewardenepura](#) organised a higher studies webinar; a knowledge-sharing session from the university alumni to the undergraduates of the [Faculty of Applied Sciences](#). This event was a continuation of the webinar on higher studies that first took place in 2021.

The higher studies webinar was successfully held on 27th August 2021, 7.00 PM onwards via Zoom with over 150 participants from all years who joined with the sole purpose of educating themselves about the opportunities that lie ahead of them in Sri Lanka and overseas. The speakers of the webinar were [Ms. Vihanga Gunadasa](#) (PhD. candidate at the University of Sydney, Australia), [Mrs. Dovini Jayasinghe](#) (PhD. candidate at the University of South Australia, Australia), and [Mrs. Kalpani Perera](#) (Msc. student at Simon Fraser University, Canada), who collectively shared their diverse overseas experiences on both academic and non-academic aspects.

The session started with the speakers addressing their unique takes on managing time as an undergraduate and other general question. In addition to the topic of time management, the speakers shared their personal experiences on the level of grades and other academic qualifications that undergraduates are expected to maintain to be eligible for higher studies in foreign universities. Among other topics, the differences between different types of PhD programs and scholarships were also discussed. Finally, insights on the different outbound activities and the leisure time that is available for graduate students were shared through speakers’ personal experiences. Through this, the importance of prioritizing mental health and communicating effectively with supervisors was harped on, highlighting not only academics but the overall well-being of higher studies candidates studying around the globe.

# HIGHER STUDIES WEBINAR



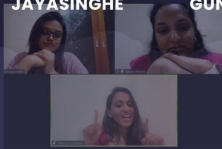
DOVINI  
JAYASINGHE



VIHANGA  
GUNADASA



KALPANI  
PERERA



## THANK YOU!

FOR YOUR IMMENSE GUIDANCE

AND MOTIVATION



STATISTICS SOCIETY  
UNIVERSITY OF SRI JAYAWARDENEPURA

Finally, due to the economical and political crisis prevailing in the country, the Annual General Meeting to appoint the new office was postponed until September 2022. Thus, concluding the responsibilities as the office bearers for the year 2021/2022, the new board of officials of the Statistics Society for the year 2022/2023 assumed duties in September 2022. As a final closing note, the office bearers for the year 2021/2022 of the Statistics Society would like to express their heartfelt gratitude to everyone who supported and contributed to the events that happened within their term. Last but not least, our gratitude also extends to [Dr. Rajitha Silva](#) for his utmost support and guidance given to us in organizing all of these events and in always being able to find the right resources.

#### Board (2021/2022)

President- [Janith Wanniarachchi](#) (3rd year)

Vice President- [Ushan Madushanka](#) (2nd year)

Secretary- [Rashmini Rathnaweera](#) (3rd year)

Assistant Secretary- [Rashmi Jayasekara](#) (2nd year)

Editor- [Maleesha Panangala](#) (3rd year)

Sub Editor- [Savindu Kodikara](#) (2nd year)

Junior Treasurer- [Charith Eranda](#) (2nd year)

Committee members :

[Ann Fernando](#) (3rd year)

[S. Abhishanya](#) (3rd year)

[Chalani Pradeepika](#) (2nd year)

[Rajitha Lakshan](#) (2nd year)

[Ishani Upatharitha](#) (1st year)

Minindu Karunasena (1st year)