Report on the Session: "How to Improve Research Skills" by Sundar Rajan Sir

Introduction

The School of Computer Applications in association with International relations conducted two-day session on *How to Improve Research Skills* by Prof.N. Sundararajan(Retd), School of Electrical and Electronics Engineering, Nanyang Technologies University, Singapore an expert in the field of academic research. The session was designed to help Ph. D. students understand the nuances of starting research, writing academic papers, and navigating the complex world of thesis writing and paper submission. The session aimed to equip participants with essential skills and insights to enhance their research capabilities and understand the ethical aspects of writing and publishing papers.

Day 1: Introduction to Research and Paper Writing Basics

On the first day of the session, Sundar Rajan Sir focused on the foundational aspects of research and the essential skills required for writing research papers. Key topics covered included:

1. **How to Start Research:**

   o Sundar Rajan Sir emphasized the importance of selecting a research topic that is both interesting and relevant to the field of study. He explained that successful research begins with a clear understanding of the research question or problem.

   o He introduced methods for conducting a literature review, highlighting the significance of reviewing existing research to identify gaps and areas that require further exploration.

2. **Basics of Writing a Paper:**

   o Sir discussed the basic structure of an academic paper, which includes sections such as the abstract, introduction, methodology, results, discussion, and conclusion. He stressed that each section serves a distinct purpose in communicating the research effectively.

   o He also covered the importance of clarity, conciseness, and organization in writing. Research papers should present complex ideas in a manner that is easy to understand while maintaining scientific rigor.

3. **Identifying Research Objectives:**

- o He emphasized the importance of having clear research objectives and goals to guide the entire research process. A well-defined objective helps researchers stay focused and structured throughout their work.

4. **Time Management in Research:**

   - o Sir shared strategies for managing time effectively during the research process, including setting milestones and deadlines for each stage of the project. He stressed that good time management helps ensure that research is completed on time and within scope.

Day 2: Advanced Topics in Research: Thesis Writing, Paper Acceptance, and Ethics

On the second day, the session shifted to more advanced topics related to thesis writing, paper submission, and ethical considerations in research.

1. **Thesis Writing:**

   - o Sundar Rajan Sir discussed the structure and key components of a thesis. He explained that a thesis should not only present research findings but also contribute to advancing knowledge in the field. He highlighted the importance of a clear research question, methodology, and literature review in building a strong thesis.

   - o He offered tips for writing each chapter of the thesis, ensuring that students could articulate their research process, findings, and contributions to the academic community effectively.

2. **Paper Acceptance by Journals:**

   - o Sir provided detailed guidance on the process of submitting research papers to academic journals. He explained how to choose the right journal for publication based on the scope and relevance of the paper.

   - o He also discussed the peer review process, explaining how journals assess submitted papers and the potential challenges that researchers face during this stage. He advised students on how to respond to reviewer comments and make necessary revisions to improve their chances of paper acceptance.

3. **Ethics of Writing Papers:**

- o   A significant portion of the second day was dedicated to discussing the ethical aspects of research and academic writing. Sundar Rajan Sir covered topics such as plagiarism, proper citation practices, and the ethical responsibilities of researchers.

- o   He stressed the importance of integrity in research and writing, highlighting that researchers must always give credit to original sources and avoid any form of academic misconduct.

4. **Maintaining Academic Integrity:**

- o   Sir emphasized the importance of conducting honest and transparent research. He encouraged students to follow ethical guidelines when presenting results, especially when dealing with sensitive data or information.

Conclusion

The two-day session on *How to Improve Research Skills* by Sundar Rajan Sir was an invaluable learning experience for all participants. The session provided both fundamental and advanced insights into the world of research, focusing on how to start a research project, write academic papers, and navigate the process of thesis writing and journal submissions. Additionally, the discussions on ethics in research were crucial for ensuring that students understand the importance of maintaining academic integrity throughout their research careers.

The knowledge shared during this session will undoubtedly help participants enhance their research skills and approach academic writing with a more structured, ethical, and informed perspective.