Prof. Jay Rajasekera
Conducting Thesis Supervision for IUJ Students

I have both business and academic experience. I worked at AT&T and its world-renowned Bell Laboratories in the US for a long time. I also had run my own business ventures. Plus, I have long academic experience at teaching and conducting academic research at IUJ. I have also taught as visitor at Sophia University in Tokyo and given invited lectures at University of Tokyo. I have supervised the largest number of students ever supervised by an IUJ professor – students from about 40 countries from all continents of the world.

I offer two options for the students to receive my help for thesis advice:

1) Thesis
2) Research Report

For me, Thesis or Research Report option makes no difference. Some JICA or Government Sponsored students are required by their sponsor to write a “Thesis”. Sometimes, when the student goes back to their former job, they need to give a “Thesis Presentation” to the organization.

According to Japanese Ministry of Education, thesis research needs regular meetings with the supervisor (called Thesis Seminars) and the thesis must be “defended” in a “Thesis Presentation” in front of a “Thesis Committee” (usually two or three faculty, including your research advisor. Please talk to me if you like to write a “Thesis” under my supervision.

Conducting Research for Thesis or Research Report:
In here, student would explore the kind of areas that I have expertise or areas that I have research experience. There are two ways to explore my research interests, with regards to thesis advice.

One is to examine the past thesis that I have supervised. This can be done by going to the IUJ library website and searching thesis database, by selecting my name as search criteria. The website address is: http://www.iuj.ac.jp/library/theses/

In here, go to Advanced and select my name and then search, as the screenshot below shows:
By examining the thesis titles, one can see the kind of areas that I have provided thesis supervision.

The second method to find out about my research is to go to my homepage, where I list up the research work of most of my published articles. These are of a bit technical nature. But, some ideas from these research articles can be used in multiple areas of practical settings involving individual interests, applications in private sector, or interests in public sector.

For example, recently one MBA student talked to me about his research interests in BIG DATA. After thinking a while, it occurred to me that “Entropy”, in which I have published several journal articles, may be used to explain the value of BIG DATA. I pulled out some formula from one paper and experimented its behavior after putting it into an Excel model. Then, we ran a kind of “simulation” to see how the information from TWO databases (instead of one database) would increase the value of “INFORMATION”. It turned out to be interesting research finding. I am working now to publish it as a full paper.

I conduct research on wide areas from strategy, IT, financial engineering, project management, risk management, mobile and web applications, using IT and Mobile Apps in education, health care, environment, and creating new business using technologies.

In addition to those two, one can individually talk with me as well. One can explain what he or she has in mind and see if I can offer good advice to provide supervisory support. If I feel confident doing so, I will tell that; if not, I will suggest some options that one can explore.

Special Research Areas:
In here, one can join to help with the research areas that I have identified as potential for large research contributions. Currently, I have two such areas (I call them Research Platforms):

a) Cloud Computing, Smart Cities, Smart Government, and Big Data
b) The innovations of ICT and their strategic use in Governance, Society, and in Globalization

I provide these two “Research Platforms” for anyone who may think that they can make some contribution to either of the two.

Platform a) belongs to a new growing area of interest by government as well as private sectors. As organizations grow, their hold of data also grows. The more data they have the more intelligence can be extracted from that “Big Data.” But, that requires connecting huge databases and advanced analytic tools. In order to secure such huge data and also to be able to provide a cost effective analytic environment, the “Cloud Computing” idea emerged and implemented. With huge databases, intelligence hidden in them gives potential to think “smart”, thus the concepts of Smart Cities, Smart Government etc. This platform gives opportunity for a student to explore all such as a thesis option.

Platform b) is also a broad area. Any innovative idea to enhance government – rather e-government --, or society as a whole, or help with the globalization, all come under this platform. In fact some practical that I have done with helping Minamiuonuma City to promote itself using technologies, or a Ministry of Education funded e-health project involving several developing countries in Asia, Africa, and South America, that I am doing (in collaboration with nursing experts from medical universities in Japan) are some examples. Students, if they like can join to help me with additional research in these areas in this platform.