

Dr. Mohan Venkataramana

President, EXPERTEZE

P.O. Box 1742, Monrovia CA91017

Phone: (626)399-1843

Email: mohan@experteze.org

To

Prof. Nitin S. Shirao,
Director,
Siddhant Institute of Computer Application,
Sudumbre, Pune, Maharashtra, India 412109

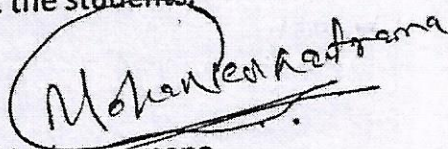
Dear Prof. Nitin. S. Shirao,

Hope all is well.

It is my pleasure to work with you regarding the opportunity to collaborate with you and your colleagues and launch the EXPERTEZE projects with your college. It is very exciting for us to realize that both our organizations share the passion for creating a conducive environment for our young generation of students to learn and grow in the cutting edge of biotechnology and related areas, and help prepare the next generation to become proficient and capable in these emerging areas of technologies. It is our pleasure to play a part in this endeavor and help create collaboration opportunities with you for our students to engage and learn from researchers and scientists from industry and research institutions to bridge this important gap. We really appreciate the support and enthusiasm of your college administrators, staff and students in making this effort a reality and hope this effort will grow and take root in other organizations in India, USA and rest of the world.

I am pleased to formally invite your college to be our partner in this effort. Per my conversation with you, I have attached a draft MOU for your review and concurrence, and am looking forward to our continued discussion and effort to define and implement this worthwhile effort and benefit the students.

Sincerely,



Dr. Mohan Venkataramana

President

EXPERTEZE

Memorandum of Understanding

This Memorandum of Understanding (MOU) is entered into on the date indicated below, by and between:

EXPERTEZE, a 501(c)(3) non-profit organization, located at Cambridge Massachusetts USA 02139, (hereinafter referred to as "EXPERTEZE"), and Siddhant Institute of Computer Application, Pune, Maharashtra, India 412109 (hereinafter referred to as "SICA"). Both organizations will hereinafter be referred to as "PARTIES".

1. PURPOSE:

1.1 The Parties recognize the benefits to be derived from collaboration, cooperation and mutual interaction for the development and promotion of joint activities to address issues of mutual interest, designed to foster and promote collaboration and undertake research activities.

1.2 This MoU sets forth the intentions of the Parties for increased collaboration, cooperation and interaction between themselves and does not create any legally binding commitments. Whenever the Parties agree to undertake specific joint Projects with legally binding operations, they will develop separate written agreement for such Projects setting out each Party's roles, responsibilities, funding, contribution, deliverables and budgets.

1.3 The purpose this MOU is to create a collaborative academic environment and framework between the SICA and EXPERTEZE for training students in the areas of bioinformatics, computational biology, genomics and systems biology and related areas (hereinafter referred to as "RESEARCH AREAS"), and provide opportunities for the students and participating staff to develop research skills and conduct independent projects of relevance to industrial research and development (hereinafter referred to "EXPERTEZE PROJECTS"), as defined in the following section ("Statement of Mutual Interests and Benefits").

2. DEFINITIONS:

2.1 EXPERTEZE: The line of business established by HEALTH INNOVATORS, a 501(c)(3) non-profit organization, incorporated in Massachusetts USA, and located at Cambridge Massachusetts USA 02139;

2.2 SICA: The academic institution participating in collaboration with EXPERTEZE to develop, implement and conduct the program for the benefit of the students consistent with the academic goals of the institution;

2.3 RESEARCH AREAS: bioinformatics, computational biology, genomics and systems biology, artificial intelligence, machine learning, big data and related areas (as described in the website www.experteze.org) as well as other academic disciplines as deemed appropriate by EXPERTEZE;

2.4 RESEARCH ORGANIZATIONS: public and private industrial research and development organizations engaged in research activities with EXPERTEZE. These organizations sponsor projects which are assigned to the students and student teams for performance at the SICA;

2.5 EXPERTEZE PROJECTS: independent projects of relevance to RESEARCH ORGANIZATIONS and assign to students at the SICA;

2.6 EXPERTEZE SCHOLARS, EXPERTEZE FELLOWS and EXPERTEZE RESEARCHERS: Students and Staff participating in the EXPERTEZE projects.

2.7 EXPERTEZE CIRCLES OF EXCELLENCE: Invitation-only programs to facilitate collaboration and networking between students and researchers in targeted areas of research and learning.

In consideration of the above premises, the parties agree as follows:

3. STATEMENT OF MUTUAL INTERESTS AND BENEFITS:

3.1 EXPERTEZE is dedicated, in collaboration with academic institutions around the world as well as public and private research institutions and laboratories, to creating, facilitating and promoting a scientific research oriented environment by which the students can train and learn complex scientific concepts in the RESEARCH AREAS; develop expertise in designing and conducting independent and group oriented projects in these and related disciplines; learn the basics of these areas of science and technology with focus on learning the underlying concepts and paradigms; design and execute laboratory studies that validate and extend published research papers and articles published in peer reviewed journals, and learn the skills necessary to read, understand, and validate the published results by independent laboratory effort; learn, understand and implement computer algorithms and become familiar with the tools, databases and other research artifacts pertaining to the study of the RESEARCH AREAS; learn the processes and procedures involved in collaborative research; learn the mechanisms and processes of research being conducted at world class organizations and industrial research laboratories (hereinafter referred to as "RESEARCH ORGANIZATIONS"), and learn to interface and communicate with peers, scientists and mentors in industry; and to develop mastery of these subjects and develop a passion for independent research in the RESEARCH AREAS, as well as related cutting-edge science and technology. SICA is an academic institution dedicating to fostering an effective learning environment and creating opportunities for diverse populations of young students in areas of limited resources and instilling in them a passion for learning and growth. Both EXPERTEZE and SICA together believe that by opening up the opportunities and guiding the students who are constrained by lack of conducive environment and resources, we can grow the next generation ready for the technological and social challenges faced by future generations, and level the playing field. Both organizations are committed to making effort and taking positive and proactive activities to create such a conducive environment and make a difference.

4. INTENT:

4.1 The intent of this MOU is to outline the activities and commitments by EXPERTEZE and SICA to promote the goals outlined in the previous section ("Purpose"), and to define the steps to help each other accomplish mutually beneficial objectives. The students participating in the EXPERTEZE projects will be called EXPERTEZE SCHOLARS.

5. EXPERTEZE shall:

1. Create a framework for establishing channels of research in the RESEARCH AREAS;
2. Provide resources and external relationships and intangible support, to SICA to implement such channels of research at the college;
3. Provide resources, mentorship, feedback support from RESEARCH ORGANIZATIONS to the student teams engaged in EXPERTEZE PROJECTS as appropriate;
4. Make available academic materials and other mentoring support to facilitate the creation of favorable environment for conducting research and learning in the RESEARCH AREAS;

5. Establish channels of communication and interfaces to enable students to engage with external (public and private) industrial research organizations currently performing activities in the RESEARCH AREAS;
6. Design, suggest, propose, plan and oversee relevant topics of research in the RESEARCH AREAS of current interest to these RESEARCH ORGANIZATIONS;
7. Provide the point of contact for interfacing between the industrial research organizations and SICA;
8. Obtain and make available the funds to the SICA as appropriate for the conduct of EXPELTEZE PROJECTS, and otherwise manage the financial transactions relating to the conduct of the independent projects undertaken as part of this initiative.
9. It is the intent of EXPELTEZE to provide EXPELTEZE SCHOLARS appropriate financial support while working on EXPELTEZE PROJECTS, as well as appropriate Certificates of Merit, monetary rewards and other recognition of excellence to motivate them in this endeavor.

6. SICA shall:

1. Create an academic environment to facilitate formation and performance of EXPELTEZE PROJECTS by participating EXPELTEZE SCHOLARS at the campus;
2. Provide logistic and organizational support to EXPELTEZE to make this effort a reality and successful, including making available resources for ongoing consultation and collaboration with EXPELTEZE and RESEARCH ORGANIZATIONS;
3. Create structures and make available facilities for the conduct of EXPELTEZE PROJECTS by EXPELTEZE SCHOLARS at the campus facilities, including laboratory (e.g. "wet labs"), computer facilities, library facilities, as well as facilities for field work outside campus as appropriate.
4. Provide facilities for the establishment of an EXPELTEZE Office as a resource to students on campus for obtaining ongoing information about EXPELTEZE and conduct of EXPELTEZE related administrative activities within the campus;
5. Provide logistical, tangible and intangible resources (including faculty, post-doctoral and post graduate student support) for mentorship to the EXPELTEZE SCHOLARS engaged in EXPELTEZE PROJECTS;
6. Provide necessary support and guidance such as time for conducting research and balancing the needs of the students between conducting independent research and other academic responsibilities;
7. Collaborate with EXPELTEZE organization as needed in the smooth and focused conduct of the relationship to accomplish mutual goals, including periodic evaluation and assessment of the program effectiveness, financial matters and development of appropriate reward schemes;
8. Collaborate with EXPELTEZE and provide support for promoting and creating a positive impression and visibility to the public, as well as support the effort towards extension of the program to other organizations in India and around the world, and to facilitate interactions and engagement of EXPELTEZE SCHOLARS with others in other participating organizations;
9. Create appropriate training and initiation programs (including classes, demonstration sessions and coaching sessions) for students to become familiar and proficient with the processes and steps necessary to engage in EXPELTEZE related activities, as well as provide resources to help select the appropriate students to the teams based on the criteria defined by EXPELTEZE AND SICA in consultation with each other.

7. DURATION OF MOU AND TERMINATION:

7.1 The terms of this MOU will begin when both parties have signed the document and will continue indefinitely, until terminated by either party by giving a written statement to that effect to the other party. Upon termination, both parties will ensure that the termination of this agreement is properly disseminated to the third parties, without cause, and refrain from any activity that would imply such association as continuing thenceforth. Upon termination of the MOU, both parties will identify any areas of mutual concern (including but not limited to Intellectual Property etc.) and work to find a common and mutually beneficial resolution.

8. INTELLECTUAL PROPERTY:

8.1 It is anticipated that during the course of the conduct of the MOU, researchers from the SICA will work closely with EXPELTEZE and other participating institutions on technologies of contemporary interest and value. The intent of EXPELTEZE is to disclose and publish the results of the work of the researchers in open literature such as arXiv and bioRxiv, which are industry standard forums for sharing the research output with the larger scientific community. Likewise, EXPELTEZE encourages the researchers to make available all supporting materials through public Github repositories. EXPELTEZE believes that, in addition to formally establishing ownership of their contributions, this mode of sharing established the credibility of the researchers in the community. The publications will include, in the title page of the published reports, the name(s) and the current affiliations of the researchers, as well as the attribution of support of the various organizations involved in the research activity. EXPELTEZE will also publish these articles in the EXPELTEZE website, again providing the credit and acknowledgement of support from the participating organizations for their research.

8.2 While the intent and focus of EXPELTEZE is to encourage open sharing of the discovery, there are certain situations when such open disclosure is not feasible. One such instance is when the researchers wish to hold off open sharing due to their wishing to conduct additional experiments or analysis prior to publication. EXPELTEZE will honor such requests and will support the researchers' decision in this regard. Another situation where such open disclosure will be deferred is when all parties (including all authors) believe that the invention has commercial value, and the invention is then transferred to a group in EXPELTEZE incubator for facilitating the startup activities based on the Intellectual Property, including filing of any patents or copyright protection. In all such cases, EXPELTEZE will be the sponsoring agency for the incubator team and will ensure that the Intellectual Property rights of all researchers and participating institutions are protected through the commercialization process. In these circumstances, the publication of the research results in open literature may be delayed by mutual concurrence, and efforts will be taken to publish the results in the open literature at the earliest feasible opportunity. In the case of any differences of opinion in any of the above steps, EXPELTEZE will mediate the process and seek to arrive at the best possible compromise.

We, the undersigned, have agreed on the contents this MOU. Any changes must be agreed to by both parties.

SICA

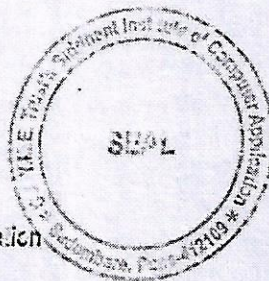
Signed _____

Name: Prof. Nitin S. Shirao

Title: Director

Director

Siddhant Institute of Computer Application
Sudumbare, Maval, Pune-412 100.



EXPELTEZE

Signed: _____

Name: Dr. Mohan Venkataramana

Title: President