



National Artificial Intelligence Forum, 2021

REPORT





SPCAI

National
Artificial Intelligence
Forum 2021

An Initiative of SPCAI, PAF-IAST



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Executive Summary

On September 2nd, 2021, the Sino-Pak Center for Artificial Intelligence Center (SPCAI) organized the National Artificial Intelligence Forum (NAIF) 2021 at Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST), Haripur. The forum was held under the auspices of the Ministry of Information Technology and Telecommunication (MoITT), Government of Pakistan, and Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST). The forum was open to the public, and approximately 200 people joined the forum. The attendees consisted of representatives of the leading companies in Pakistan, highly successful academicians in artificial intelligence, Ministry of Information Technology and Telecommunication, Pakistan Science Foundation, Pakistan Software Houses Association, notable dignitaries, faculty members of various universities, researchers and students. During the different sessions of a forum, speakers and attendees shared their experiences, opinions, thoughts, and suggestions regarding the application of Artificial Intelligence in different technology sectors.

The acting managing director of SPCAI, Dr. Atif Mashkoor, Rector PAF-IAST, Dr. Muhammad Mujahid, and Chairman Prime Minister Task Force on Science and Technology, Prof. Dr. Atta Ur Rehman, gave their opening remarks at the start of the National Artificial Intelligence Forum 2021. It was then followed by a visit to the expo called Lab2Market event. This event showcased 28 shortlisted projects from the students of various Pakistani universities related to AI-based applied research ideas. The projects were related to computer vision, robotics, intelligent systems, IoT, smart agriculture, smart health, biomedical applications, and relevant areas. After which the workshop started with talks from the presenters in the following areas:

- i. Academic Talks
- ii. Panel Discussion
- iii. Industrial Talks
- iv. International Experts Talks
- v. National AI Policy Discussion

At the beginning of each session, the participants were presented with background information by the session moderator. Then, each presenter shared the experiences and vision to the audience, and exciting discussions happened from the audience side.

Academic talks focused on how the leading academicians' competencies are being developed in various areas of applied AI. The panel discussion followed. It involved the leading industries in Pakistan, academicians, and government officials. The discussion was targeted at the policy elements and collaborations that can facilitate AI-based development in Pakistan. In addition, it explored solutions to the various barriers and helped to reach a consensus. The industrial talks session was focused on the key industries sharing their experiences and recommendations related to the future development based on AI. It was then followed by the international expert's talks session that highlighted the global trends in AI. Finally, the workshop concluded with a detailed discussion on the national AI policy.

Parallel to the NAIF sessions, the experts at the Expo (Lab2Market) evaluated the displayed projects in detail. The top three projects were selected on comprehensive criteria for the award of prizes. The University of Agriculture Faisalabad won the first cash prize of a Hundred Thousand Rupees against the CNC Smart Farming Bot project title. The second cash prize worth seventy-five thousand rupees was won by Mehran



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University of Engineering and Technology, Jamshoro, against the project title, Design and Progression Analysis of Neuro Rehabilitation System using Machine Learning. The third cash prize of fifty thousand rupees was won by the National University of Modern Language Islamabad against the project title, Talking Glove for Mute People. The participating students appreciated the efforts and arrangements made by the organizers. They also desired that such enabling events and competitions should be organized regularly to promote science and technology, specifically AI applications in Pakistan.

Ministry of Information Technology
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Introductory Talks / Welcome Note

The event was started with the recitation of the Holy Quran followed by the National Anthem, the first session of the NAIF was moderated by Dr. Fizza Murtaza, Assistant Professor at SPCAI gave a brief intro about the Sino-Pak Center for Artificial Intelligence (SPCAI). She described that SPCAI is the center of excellence at Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST). This center envisions building national capacity to carry out R&D in the emerging fields of artificial intelligence by producing expertise through MS/Ph.D. programs in collaboration with Chinese and Austrian universities. And to solve local problems using AI and market them through the technology park and to provide high-value shared services to industrial partners.

In the first session speakers gave Introductory Talks:



1. Dr. Atif Mashkoor

The first speaker in this session was Dr. Atif Mashkoor. He is a Foreign Faculty member at PAF-IAST, a Senior Research Scientist at Johannes Kepler University Linz, Austria, an adjunct faculty at ICCBS Karachi, and the founding Managing Director of SPCAI. He has extensively worked on European-level research and development projects in Austria, France, and Portugal.

Dr. Atif introduced SPCAI as well as PAF-IAST. He described to the audience the Idea and significance of the National Artificial Intelligence Forum (NAIF) 2021 which was organized under the sponsorship of the Ministry of Information Technology & Telecommunication (MoITT), Government of Pakistan, and PAF-IAST. He enlightened that NAIF was the first of its kind in the history of Pakistan, which aimed to develop an awareness of the role and impact of AI in Pakistani society and industry, as well as industrial processes, social fabric, and economic growth.



2. Prof. Dr. Atta-ur-Rahman

The second speaker in the introductory session was Prof. Atta-ur Rahman. He is the Chairman of the Prime Minister's Task Force on Science and Technology, an expert in the field of natural product chemistry. He is the winner of several national and international awards. Dr. Atta-ur Rahman highlighted the importance of AI in socio-economic development in every facet of our life whether in agriculture, health, industry, transportation and in the environment or communication, etc. He gave the importance of AI as a core subject in every field of life and also shared his Research experience on neuroscience in addition to AI in medical science and also in chemistry.



3. Prof. Dr. Mohammad Mujahid

The next speaker and Chief Guest of the NAIF was the honorable Rector of PAF-IAST, Prof. Dr. Mohammad Mujahid. He is a Materials Engineer, Researcher, Teacher, Professor. He has served at some of the best universities of the world along with over 30 years of international experience in teaching, research, and academic management. For his meritorious achievements, he was awarded Pride of Performance. Dr. Muhammad Mujahid explained the Fachhochschule model to the audience. He also talked about different excellence centers at PAF-IAST including SPCAI.





Lab2Market Expo



After the Introductory Session, the audience was given a brief about the initiative of "Lab2Market Expo" organized by the Sino-Pak Center for Artificial Intelligence (SPCAI), in collaboration with Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology (PAF-IAST), as a part of the National AI Forum. The primary purpose of the Lab2Market event was to provide a platform to students from Pakistani universities to showcase their AI-based applied research ideas in the form of projects, prototypes, or artifacts at the NAIF.

The registration phase for this event was started on 15th June 2021. A total of 235 projects were registered for this event in the initial phase, where 66 universities, from 19 different cities of Pakistan, participated in the registration. The registered projects were rigorously evaluated by the experts in two different phases and finally, 28 projects were selected for the exhibition phase on that day. Apart from these 28 projects NAIF had projects from industries in the industrial expo section.

All the audience was guided to visit the Industrial Expo and Lab2Market projects.





Academic Talk

The session of Academic Talks in NAIF 2021 was conducted by Dr. Sohail Khan in which prominent researchers and professors with extensive experience in the fields of Artificial Intelligence and Machine learning presented their research work and ideas about the emergence and future of AI in Pakistan. The outline of the session is as follows:



1. Prof. Dr. Faisal Shafait

Head of Computing at the Faculty of Electrical Engineering and Computer Sciences (SEECS) in NUST, Pakistan, presented different ongoing research projects related to aerial and ground surveillance and natural language processing. In the project AI-Driven Decision Support System for Pakistan Judiciary, AI-based forensic tools will assist the Supreme Court on data anonymization, knowledge database development, and verdict recommendations. Other projects include water resource estimation through Satellite-Based Image analysis, Urdu Voice-based Interaction for in-car Navigation, COVID-19 chatbots, audio/video Analytics for TV broadcasts, and more. He highlighted the bright future of AI in Pakistan and encouraged academics to bring innovations in daily routine tasks.



2. Prof. Dr. Muhammad Haroon from the University of Engineering and Technology Taxila spoke about the cross model biometric tasks and the effect of multiple languages on face-voice association. He highlighted the inefficacy of existing data sets for language annotations. To validate the research model, he proposed a Multilingual Audio-Visual MAV-Celeb dataset that provides data of 154 celebrities in 3 languages and concluded that speech recognition is also a language-dependent task. He also introduced the audience to the importance of AI in Entomology, anomaly detection and recognition, and indigenous development of miniature robots.



3. Dr. Hassan Shahzad of NCP, Quaid e Azam University, Islamabad, emphasized the collaboration of the National Centre for Physics, Islamabad with CERN in Switzerland on various projects related to RPC Detector Control System and Large Hadron Collider. He also highlighted the widespread use of Machine Learning in MRI image reconstruction and its future aspects.



4. Prof. Dr. Khurram Khurshid, from the Institute of Space Technology (IST), Islamabad, presented different Machine Learning and Computer Vision projects related to avionics along with their applications. It consisted of Aircrafts Detection in Satellite Images, Object Concealment in Satellite Images, and Saliency-based Visualization & Segmentation of Hyperspectral Satellite Images. Different applications of Hyperspectral Image Analysis are Document Forgery Detection, Signature Extraction and Verification, and writer identification





Panel Discussion

NAIF had conducted a very interested and interactive session with AI Academic and Industrial Experts, the session was moderated by Dr. Atif Mashkoor and the brief intro of panelists were:

1. Dr. Ahmad Raza Shahid

Dr. Ahmad Raza Shahid is the Principal Investigator of Medical Imaging and Diagnostics Lab, National Center of Artificial Intelligence (NCAI), (an HEC funded project worth Rs. 97.57 million). He is also the CEO of AI Care, an AI-based startup working in the domain of diagnostics through medical images. He has more than 20 IF publications to his credit with a combined IF of almost 50. He completed his Ph.D. in NLP in 2012 from the University of York, UK.



2. Mr. Haroon Kanth

Country Head of Global Consulting Center, Pakistan, an offshore captive consulting organization of Teradata Corporation. Additionally heading the Analytics consulting practice at Teradata Global Consulting Centers.



3. Mr. Syed Ahmad

Syed Ahmad is the Founder & CEO of DPL, a leading software company based in Islamabad. He is also the author of Digital Policy of PTI, which is part of PTI's manifesto. At present, he is a member of the Prime Minister's Task Force on IT & Telecom. Syed is currently serving various government entities such as KPIT Board and incubators such as NEST I/O and Comsats Cubator-1ne.





4. Dr. Reaz-ud-din

Dr. Reaz Uddin is working as Associate Professor at ICCBS, University of Karachi. He has 27 research publications in international peer-reviewed journals. The research interests of Dr. Reaz involve the field of Computational Biology/Systems Biology. The complete sequence identification of the human genome has opened many doors to exploit it in drug discovery-based research. The sophisticated computational resources in this context could provide great help to manipulate raw data into meaningful information. Dr. Reaz's particular area of interest includes the use of Computational Biology methods to understand complex biological phenomena.





Questions & Answers

- Q) What is the role of AI in diagnoses from medical imaging and business opportunities in Pakistan?**

Response: Dr. Ahmad Raza Shahid

Everyone knows that artificial intelligence (AI) is the most discussed topic in medical imaging research, both in diagnostic and therapeutic. Researchers have applied AI to automatically recognize complex patterns in imaging data and provide quantitative radiographic characteristics assessments. Artificial intelligence in the medical imaging market is expected to grow in the forecast period of 2021 to 2028. It is due to its accuracy, time, and cost compared to the existing technologies in the field.

- Q) What is the role of cloud-based services and the market of AI in the perspective of Pakistan?**

Response: Mr. Haroon Kanth

Combining the artificial intelligence module and cloud computing services will result in a remarkable transformation in the technology market. As public cloud service providers continually invest in AI development, it attracts an appropriate set of customers to this technology.

Although this technology is still in its early stages and expects its progress, therefore, we can look forward to exceptional innovation in the future.

- Q) What role of AI do you imagine in the Pakistan software industry?**

Response: Mr. Syed Ahmed

In this digital age, the utilization of AI is expanding in numerous areas. AI empowers industries such as education, medical and healthcare, media, e-commerce, architecture, and many more. With evolved AI technologies, it has become very convenient to construct advanced marketing and promotional strategies. An artificial intelligence-driven software can target the right audience, generate promotional campaigns, and constitute successful customer solutions.

- Q) How AI helps in early-stage disease diagnostic and what are its applications in biomedical and genetic research?**

Response: Dr. Reaz-ud-din

Using AI is helpful in the early detection of many diseases like TB, brain tumors, breast cancer, etc. Lung cancer is the deadliest cancer globally; about 75 % of those who have it die within five years of diagnosis. But when cancers are found early, the prognosis is much better. If tumors are small and confined to the lung, almost two-thirds of people survive for at least five years.

AI technology can analyze and process large and complex biological data to help clarify the corresponding physiological and pathological mechanisms, assist in designing and screening drug molecules, and design and analyze clinical trials.



Industrial Talks

The Industrial Talk session was started after lunch in the second half. Dr. Fiza Murtaza, Assistant Professor (SPCAI) had moderated this session. The session included different Industrial Experts, which were invited from different industries in which they explained their AI-related products and ideas in their presentation. Following speakers from industries shared their experiences and plans:



1. Mr. Ather Imran

The first industrial speaker was Mr. Ather Imran. He is the CEO and Director of Sybrid Private Limited, a company of the prestigious Lakson Group of Pakistan, as well as a Venture Partner in Lakson's Venture Capital Fund (LIVC). He emphasized the importance of data accumulation in Machine Learning and its availability. He highlighted public concerns regarding AI investment and adaptation issues in Pakistan by presenting a "Delta" approach. Currently, Sybrid focuses on the areas of agricultural planning, healthcare, and civic services.



2. Dr. Yusuf Zafar

The next industrial speaker was Dr. Yusuf Zafar, he is Director of the AI Lab at Pakistan Atomic Energy Commission. He introduced the hardware implementation of artificial intelligence and its errors, pitfalls, and bottlenecks. He explained the importance of implementing deep learning algorithms on TinyML low-power devices. TinyML transforms and optimizes IoT privacy concerns to provide solutions for low latency, communication bandwidth-limited applications. Finally, he concludes with a roadmap for compact devices with artificial intelligence that works optimally, achieve longer battery life with minimal power consumption, and interact autonomously in different environments.



3. Dr. Qaisar Ahsan

The next speaker was Dr. Qaisar Ahsan, Director General at Artificial Intelligence Technology Center, Islamabad. Dr. Qaisar gave a detailed presentation about the Artificial Intelligence Technology Center and its possible collaborations with SPCAI. He, presented the vision and various initiatives implemented by the New Artificial Intelligence Technology Center (AITeC). Labs and research work are monitored by a quality management system as well as KPI scores related to financial incentives. AITeC acts as a network of experts for technology executives in fault detection, inventory forecasting, the food/household industry and other areas.



4. Prof. Dr. Shoab Khan

The next industrial speaker was Prof. Dr. Shoab Khan. He is the Chancellor at Sir Syed Case Institute of Technology Islamabad, and the CEO of the Center of Advanced Research Engineering (CARE) since 2013. He introduced the audience to the National AI Strategy and AI Applications including Sensors and Mobility, Augmented Human Technologies, AI and Advanced Analytics, Computing and Communication post-classical. He highlighted the economic potential of emerging trends in the Internet of Things (IoT), cloud blockchain, big data, cybersecurity, and AI-powered organizations. The National AI Strategy includes a data-accessible ecosystem, AI in utilities, AI venture capital fund, STEM program, and HRD in basic computing.



5. Dr. Asif Jamshed

The next speaker in this session was Dr. Asif Jamshed. He is the Data Scientist and Head of Data Science at Analytics Pvt. Lmtd. Dr. Asif highlighted the services provided by Analytics towards AI. He talked about data analytics and AI for enterprise risk management in microfinance. He highlighted how AI helps in Credit Risk Analytics, Operational Risk Analytics, value chain insights, Social & Economic Risk Analytics, as well as paid attention to the leading concerns about borrowers' identity, loss mitigation in loan reimbursement, etc.



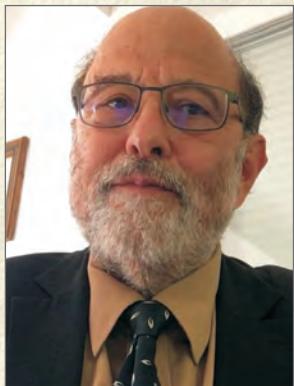
6. Dr. Sohail Khan

The last speaker in this session was Dr. Sohail Khan. He is currently working as Senior Faculty at SPCAI. He talked about various AI and machine learning-based projects being implemented in SPCAI. In the IntelliSurv project, an intelligent monitoring system for real-time video anomaly detection is being designed. Anomalies include fighting, falls, mess, towing, and more. Dr. Sohail highlighted the inability of security personnel to monitor cameras 24/7 and suggested an advanced and cloud-based solution. In the AISolar Cast project, an AI-based forecasting engine will be developed to provide precise solar energy forecasts for specific regions and geographic coordinates in Pakistan. Finally, he informed the audience about SPCAI's research facilities and laboratories.



International Experts Talks

Dr. Sohail moderated the International Experts Talks. In this session, several renowned scientists and industrial partners spoke about the rise of artificial intelligence and the importance of machine learning in different areas of science. A summary of this session is as follows:



1. Prof. Dr. A Min Tjoa

He is from Technical University spoke about the contemporary industrial revolution, which is largely based on digitization and big data, and highlighted the role of AI in the world's most advanced economies. He emphasized image processing to detect manufacturing defects and how autonomous vehicles would affect our future transportation sector. He highlighted the plight of developing countries as cheap labor is being replaced by AI-controlled machines, leading to job insecurity. However, he encouraged academics to bridge the digital human divide through higher education, collaborations, and ongoing research, which would create enormous job opportunities.



2. Dr. Bernhard Moser,

He is the President of the Austrian Society for Artificial Intelligence, spoke about ongoing research at the Hagen Berg Software Competence Center (SCCH) that goes beyond narrow AI. He pointed out various barriers and challenges to broad AI customization in the industry, such as limited data, interpretability, integration of human intelligence and AI, etc. He highlighted the role of data, its learning, and how it is managed in machine learning. He proposed the centralized moment approach and regularization theory for robust distance measurements and the choice of hyperparameters in neural networks. He presented a team artificial intelligence approach to achieve highly efficient results from static knowledge and dynamic data using optimization and control agents such as Knowledge Graph (KG) embeddings.



3. Prof. Dr. Alexander Egyed

He is from Johannes Kepler University, Austria, highlighted the importance of machine learning and software engineering. He highlighted the difference between traditional and machine learning software due to data processing and analysis. It featured a traditional V-shaped software lifecycle based on project definition, time, and project testing and integration while viewing machine learning software as data-centric based on data acquisition, training of models, and model monitoring. He highlighted the inclusion of ML elements in traditional software systems and their applications in software engineering such as cost estimates, automatic model repairs, etc.



4. Prof. Dr. Qiang Qu

He is from the Shenzhen Institute of Advanced Technology introduced the audience to data-intensive systems and their use in AI. He emphasized its role in the development of smart cities, financial transaction systems, and the transportation sector. He presented his various ongoing research projects based on artificial intelligence to identify problems and errors in various contracts and to manage supply chain systems. He emphasized ongoing research on artificial intelligence and machine learning to present the world with different options to do the same task more easily and efficiently.



5. Mr. Mansur Zhang,

He is associated with iFLYTEK China, he shed light on the real applications of AI in the field of biology and medical health sciences. From disease diagnosis to critical brain and heart operations, AI supports physicians and surgeons in their role as physician assistants.



6. Mr. Mohammad Shafiq,

He is CEO of Washington-based Advanced Telecom Services, highlighted the importance of AI in decision-making and automation. He demonstrated methods to rapidly adapt and promote machine learning in everyday life by increasing the efficiency of AI models.





National AI Policy Discussion

Apart from National Artificial Intelligence Forum, SPCAI was proud to host the facilitation regarding the policy-making of National Artificial Intelligence Policy on Ministry of Information & Telecom request.

In that activity, all speakers from the NAI Forum who were from AI Academia and Industry were invited to participate. Dr. Rafi-us-Shan took the lead as a MOITT representative and described to the stakeholders about the National AI Policy features, challenges, and initiatives in this regard.

Whereas Dr. Shoab presented a detailed presentation on AI policymaking, he described its National Strategy Building Blocks, Major Components, proposed National AI Policy Working Model, described Advanced Skill Development, defined its Key Performance Indicators, presented the model for Center of Excellence in AI.

All the participants took a deep interest in the brainstorming session and gave their suggestions and recommendations which were very much appreciated by the MoITT.

The session was ended with a vote of thanks and best wishes for the SPCAI for organizing such a successful and resultant event.





Lab2Market Event

Sino-Pak Center for Artificial Intelligence (SPCAI), in collaboration with Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology (PAF-IAST), was organized a "Lab2Market" event as a part of the National Artificial Intelligence Forum (NAIF) on 02 September 2021. The primary purpose of the Lab2Market event was to invite participants from Pakistani universities to showcase their AI-based applied research ideas in the form of projects, prototypes, or artifacts at the NAIF.

Registration

The registration phase for this event was started on 15th June 2021, with the deadline as 31st July 2021. The students from Pakistani universities currently enrolled in any degree program or have completed their degree in the last three years were eligible to register for this event.

Phase I: Initial Screening

A total of 235 projects were registered for this event in the first phase. These projects were initially evaluated by a committee consisting of three SPCAI faculty members, and 60 projects were shortlisted further for the next stage, i.e., 3-Minute Pitch (3MP).

The shortlisting of the project was done based on the following steps and criteria:

- Completeness of Project Registration Application: Projects registered with missing/vague details are left out from the next phase.
- Relevancy of Project with AI: Projects that are not relevant to AI and its applications are left out from the next phase.
- The novelty of Project Idea: The initially filtered projects are scored based on their novelty.
- Project Outcome for Exhibition: The filtered projects are scored further based on their applied nature, considering if they can be displayed as an exhibition product or not.





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The shortlisted projects from the first phase were divided into 04 groups based on their relevance to different areas, including Computer Vision, Robotics and Natural Language Processing, IoT and Intelligent Systems, and Biomedical Applications.

Phase II: Three-Minute Pitch (3MP)

The second phase, i.e., 3MP, was conducted online on 23rd August 2021, for which 04 teams of experts were formed for a detailed evaluation of the shortlisted projects. Each team evaluated a group of projects relevant to their area of expertise.

3MP Preparation Instructions: Following instructions were shared with the candidates (whose projects are shortlisted in the first phase) regarding the preparation of 3MP.

The presentation should consist of only five (05) slides with details as given below:

- Slide#01: Project title and candidate details (Name, degree, and affiliation)
- Slide#02: Project idea description (What is your project all about?)
- Slide#03: Motivation (Why is your project important?)
- Slide#04: Project output (How you are going to deliver your project, i.e., it is a software service, hardware unit, or what? How will you exhibit it?)
- Slide#05: Project Status (How much of your project is completed? What modules are pending, and how can you complete them before the exhibition?)

The primary criteria used for evaluating 3MP were as follows:

- Project Idea (05 Marks): What is the significance of the project idea?
- Project Output (10 Marks): How does a project fit to be selected for exhibition, and what is the tangible output of the project?
- Project Completion Status (10 Marks): What is the current status of the project with respect to the completion of its output/deliverable?

28 projects were shortlisted after 3MP and invited to participate in the project exhibition at the NAIFF.





Project ID	Project Title
1	SIMBot : Swarm Intelligent Miniature Robot
2	IoT and Artificial Intelligence Based Autonomous Hybrid Electric Vehicle with Self Charging and Traffic Control
3	Smart and Early Heart Attack Diagnosis using Hybrid Computing
4	Virtual Eye
5	Aangan - Automated Handwrittean Character Scoring System for Urdu e-Learning
6	IoT based wearable smart system for visually impaired people
7	Tashkhees
8	Pulmonary Diagnostic System (PDS)
9	Smart Waste Management and Classification Mechanism using Cutting-edge Approach
10	Brain Controlled Prosthetic Hand
11	Design and Progression analysis of neuro rehabilitation system using machine learning
12	AI Based Driverless Car Using High Computational Embedded System
13	4DOF Robotic Arm using AI Vision Control and Shape Recognition
14	Image Processing based Pattern Recognition and Embroidery design
15	Sweet Sleep
16	An Artificial Intelligence Based Agronomist
17	Real Time Video Surveillance Anomaly Detection System on the Edge
18	Face Recognition and Crowd Counting using Drone
19	Intelligent Health Control Security Robot
20	Emotional Health Support System based on Artificial Intelligence
21	Asymmetric Gait Detection System using Wearable Sensor
22	Street Crimes Detection
23	Visual Defect Detection
24	Brain Computer Interface for Communication of Paralyzed Persons
25	Vehicle Management System for Organizations
26	Urdu Sign Interpreter
27	CNC Smart Farming Bot
28	Talking Glove for Mute People



Phase III: Project Exhibition

The final round of the Lab2Market event, i.e., project exhibition, was held on 2nd September 2021. The projects were assessed based on their idea novelty, business aspects, working and demonstration, overall presentation, and student(s) contributions.

The experts at the NAIF evaluated the displayed projects in detail, and top-03 projects were awarded prizes as detailed below.

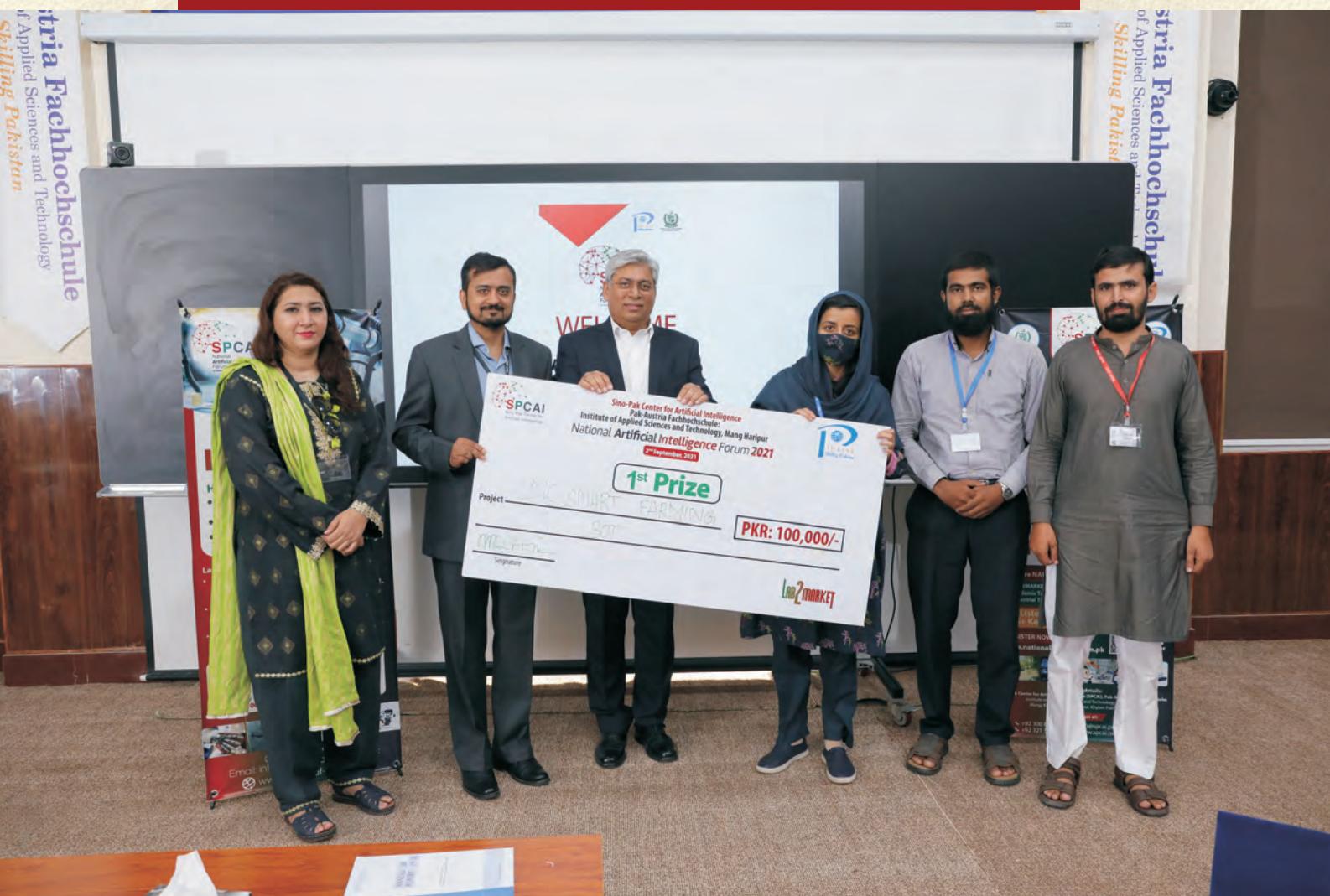
First Prize: Rs.100,000

Project Title: CNC Smart Farming Bot

From: University of Agriculture, Faisalabad

Project Members:

Noor Sajjad (Group Lead), Syed Tehseen ul Hassan, Mazhar Mehmood





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Second Prize: Rs. 75,000

Project Title: Design and Progression Analysis of Neuro Rehabilitation System using Machine Learning

From: Mehran University of Engineering and Technology (MUET), Jamshoro

Project Members: Maliha Talpur (Group Lead), Saad Rehman, Madan Lal, and Komal Khuwaja



Third Prize: Rs. 50,000

Project Title: Talking Glove for Mute People

From: National University of Modern Languages, Islamabad

Project Members: Usama Shafique (Group Lead), M. Talha Umair





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NAIF and Lab2Market Media Coverage

Friday September 03, 2021

Today's Paper

INTERNATIONAL
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National Artificial Intelligence Forum inaugurated

Afshan S. Khan Friday, Sep 03, 2021



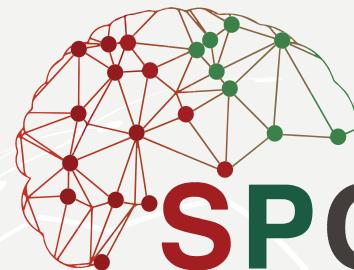
Islamabad : Sino-Pak Centre for Artificial Intelligence (SPCAI) organised the National Artificial Intelligence Forum (NAIF) 2021 on Thursday at Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST).

The forum was held under the auspices of the Ministry of Information Technology and Telecommunication (MoITT), Government of Pakistan, and Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST).

NAIF and Lab2Market were covered in almost all national print & electronic media, some of them are as follows:

- <https://www.thenews.com.pk/print/887072-national-artificial-intelligence-forum-inaugurated>
- <https://jang.com.pk/news/979159>
- <https://www.dawn.com/news/1644142>
- <https://dnd.com.pk/national-artificial-intelligence-forum-2021-inaugurated/252617>
- https://www.jehanpakistan.com/epaper/detail_news.php?news=%2Fepaper%2Fepaper%2Fislamabad%2F030921%2Fp2-08.jpg
- https://e.naibaat.pk/ePaper/islamabad/03-09-2021/details.aspx?id=p2_07.jpg&AspxAutoDetectCookieSupport=1
- https://www.express.com.pk/epaper/PoPupwindow.aspx?newsID=1108618718&Issue=NP_ISB&Date=20210903
- <https://www.nawaiwaqt.com.pk/03-Sep-2021/1408871>
- <https://www.technologytimes.pk/2021/09/03/national-artificial-intelligence-forum-inaugurated/>
- <https://www.app.com.pk/national/pakistani-researcher-invited-to-showcase-their-ai-based-applied-research-ideas/>
- <https://www.thenews.com.pk/print/888506-students-exhibit-artificial-intelligence-based-projects-at-naif>
- <https://pakobserver.net/students-exhibit-ai-based-projects-at-naif/>
- https://e.dunya.com.pk/detail.php?date=2021-09-06&edition=ISL&id=5758981_48152507
- https://e.naibaat.pk/ePaper/islamabad/06-09-2021/details.aspx?id=p8_21.jpg
- <https://www.nawaiwaqt.com.pk/06-Sep-2021/1410652>
- https://www.express.com.pk/epaper/PoPupwindow.aspx?newsID=1108625517&Issue=NP_ISB&Date=20210906
- https://www.express.com.pk/epaper/PoPupwindow.aspx?newsID=1108625518&Issue=NP_ISB&Date=20210906
- <https://tribune.com.pk/epaper/news/Islamabad/2021-09-06/OGM3MjQxMzU0NTAzYml1YjQ1MzQwMWJmMDJiMTU0NzkuanBlZw==>
- <https://www.thenews.com.pk/print/888506-students-exhibit-artificial-intelligence-based-projects-at-naif>
- <https://pakobserver.net/students-exhibit-ai-based-projects-at-naif/>
- <https://www.techjuice.pk/pakistani-researchers-invited-by-spcai-to-showcase-ai-based-applied-research-ideas/>
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