Welcome Speech from The Rector

The honorable:

- Dr. Samsuri (The Head of Higher Education Service Institution Region IV West Java and Banten as the representative of the Ministry of Education and Culture of Republic of Indonesia)
- All Plenary Speakers from Indonesia, Malaysia, Turkey and Saudi Arabia, and
- All Researchers and Reviewers

Warmest Greetings from Bina Insani University.
Ladies and Gentlemen.

At first, please allow me to commence this occasion by thanking Dr. Samsuri (the Head of Indonesian Higher Education Service Institution Region IV West Java and Banten) and Prof. Dr.rer.nat. Achmad Benny Mutiara, SSi, S.Kom (Chairman of APTIKOM) for their supports in order to make this international conference take place.

On behalf of Bina Insani University we welcome and thank the Honorable Plenary Speakers:
- Prof. Dr. Ramlee Mustapha from the Department of Engineering Technology, Faculty of Technical and Vocational Education, Sultan Idris Education University, Malaysia,
- Prof. Ir. Teddy Mantoro, M.Sc., Ph.D., SMIEEE from the Faculty of Science and Technology, Sampoerna University, Jakarta Chair of IEEE Computational Intelligence Society, Indonesia Chapter
- Prof. Dr. Ali Resül USUL from Anadolu University Vice Rectors, Turkey,
- Prof. Dr.rer.nat. Achmad Benny Mutiara, S.Si, S.Kom, Chairman of APTIKOM, Indonesia, and
- Prof. Ir. Anton Satria Prabuwono, S.T., S.Si., M.M., M.Sc., Ph.D., SMIEEE, SMACM from the Department of Information Technology Faculty of Computing & Information Technology in Rabigh King Abdulaziz University, Saudi Arabia.

The ICCoSITE 2023 delivers a prestigious international conference for researchers, educators, practitioners, and students throughout the world to present their most recent ideas, innovations and trends in the fields of Computer Science, Information Technology and Engineering.
The theme of **ICCoSITE 2023** is Digital Transformation Strategy in Facing the VUCA and TUNA Era. Bina Insani University in cooperation with APTIKOM and IEEE Indonesia Section as Technical Sponsor would like to foster and to promote the works of all scholars in the **ICCoSITE 2023.** With a hope, we can develop science and technology for a much better future.

We also thank the paper reviewers and presenters for their hard works in the **ICCoSITE 2023.** Wish you all the best of luck in your endeavor in the ocean of science and technology.

Last but not least, we would also like to acknowledge and thank our Co Hosts: Universitas Indraprasta PGRI UNINDRA, Universitas Nasional, Pionir Perubahan, Institut Teknologi Garut ITG, Sekolah Tinggi Manajemen Informatika dan Komputer ROSMA, and Universitas Majalengka UNMA, Steering Committee, Organizing Committee and Reviewers Team, and all Participants to participate in **The First Bina Insani International Conference on Computer Science, Information Technology and Engineering (ICCoSITE 2023).** Thank you for the supports and assistances, shares and cares in the First Bina Insani International Conference. All the Best! May God bless us all.

Rector of Bina Insani University

Assoc. Prof. Dr. Indra Muis, S.S.,M.M

Foreword

The engineering field is continuously moving along with fundamental changes at the level of scientific and technological concepts. Several scientific disciplines have become extinct, and some need to develop due to the ever-changing needs of society. As time progresses and it moves toward this new chapter of civilization, new engineering disciplines will inevitably evolve, and some will be eliminated. Applying engineering principles to disciplinary systems spans many subjects, including computer science, physics, technology, etc. One of the newest and fastest-growing disciplines is laying engineering foundations to meet the community's needs. Researchers develop many tools and procedures that solve problems related to many things concerning people's livelihoods. These engineers work with professionals to build instruments, monitoring tools, algorithm concepts, and other assistive devices. These engineers work at the intersection of engineering and life sciences, developing new technologies that enhance human life and well-being. Computer engineers design and manufacture computer-related hardware products for many applications, such as personal computers, cell phones, cars, and washing machines. It applies scientific and computational theory to design hardware, software, networks, computer chips, and processors. This work is often done in teams to foster various types of disciplines so that they develop quickly. Computer science has a fundamental difference: Computer Scientists focus on software and its optimization, while Computer Engineers concentrate on computer hardware or the machine itself.

On the other hand, computer engineers are concerned about security factors. Various fields of computer science engineering and other disciplines drive hardware product and chip design, development of software applications, integration of components together in the form of device driver software, project management working in multi-site teams, chip fabrication, test, and quality assurance (QA). Computer scientists investigate various software production methods, but software engineers are only interested in those techniques that make economic sense. For example, a coding technique that can be executed efficiently but with higher maintenance costs may not be a good choice because maintenance consumes many resources across the lifecycle. Current computer science theory needs to be revised to act as a complete basis for software engineering, but it is a foundation for the practical aspects of software engineering. Computer science and software engineering programs share a common foundation in core computer science, including modern programming methodologies, analysis of algorithms and data structures, and studying operating systems. The computer science program continues with advanced data structures, programming languages, and automata theory courses.

In contrast, the software engineering program includes courses in requirements engineering, software validation and testing, and software architecture. On the other hand, electrical engineering is responsible for designing, developing, testing, and supervising the manufacture of electrical equipment. It is also related to the motion of electrons in metals, large electrical systems, motors, and generators, electrical circuits in buildings, power transmission systems, and power plants. As a result, more attention has been paid to creating efficient, durable, cost-effective, and secure designs. This discipline employs the most significant number of engineers, covering everything related to electrical devices, systems, and uses of electricity. Electrical Engineers work on power plants, computers, and other electrical devices. It plays a role in almost everything we interact with daily. They design devices that are smaller, cheaper, and better. A mix of disciplines is at the heart of most information exchanges, including telephone communications, broadcasting, and the Internet-a combination of electrical engineering and computer science knowledge focusing on networks and communication systems. Telecommunications engineering is a dynamic and rapidly developing field due to today's high dependence on the Internet, mobile phones, broadband, wireless networking, broadcasting, and satellite applications. Telecommunications engineers design, implement

and manage systems to process and transmit information, finding career opportunities in computer communications and networking, mobile communications, voice, and data networking, television and radio broadcasting, optical networking, remote sensing, measurement and control, and next-generation networks. Telecommunications engineers also work in broader fields such as electronics engineering, instrumentation engineering, computer engineering, systems analysis, and control engineering. It encourages this conference to place and actualize scientific disciplines to develop concepts and apply technology that at least contributes to people's lives.

Editorial Boards,

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