

K-OpenSource: Unleashing Innovation in Industries Around the World

Korea Open-Source Software Association (KOSSA) Association Overview

2024.

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Greetings from Chairman



Greetings from Kim Taek-Wan, the 16th Chairman of KOSSA.

Marc Andreessen, co-founder of Netscape – one of the first internet browsers – startled the world in a 2011 newspaper article by claiming “Software is eating the world.” However, we can now safely claim that “Open Source has devoured the world,” in that open source has become such a **foundational technology driving the world forward**. Not only does it lay the foundation of more than 90% of technologies used in various industries, the majority of **AI software** for industries is also built on open source.

To effectively utilize open source to reduce costs and **enhance the competitiveness of businesses and nations, two perspectives** need to be considered harmoniously.

First is the developer’s perspective. Actively participating in the global open-source community to engage with the latest open-source developments, learn new technologies, and apply them to development projects ultimately aligns with enhancing competitiveness across industries. Moreover, it is crucial **to expand the influence of Korean-developed open source globally** to elevate Korea’s position in the industry and enhance the capabilities of its home-grown developers. KOSSA aims to advance these initiatives and talent development **under project “K-OpenSource”**

Second is the user’s perspective. The focus has shifted of late from the necessity of using open-source to the **efficiency and security in its use**. It is essential to manage the potential risks of license violation and security vulnerabilities that can be found in any piece of commercial software. Recently, the concept of “Software Bill of Materials (SBOM)” is emerging to mitigate such risks in the software supply chain. **KOSSA aims to introduce standardization, management protocols and best practices in SBOM to lead the way in secure software supply chains.**

Statement of Purpose



Korea Open-Source Software Association

Founded in 1999 as Korea Linux Users' Group
Incorporated in 2006 as an Association

Securing Technological Competitiveness

Serving as the channel for international exchange and cooperation to share SW technologies and develop human capital

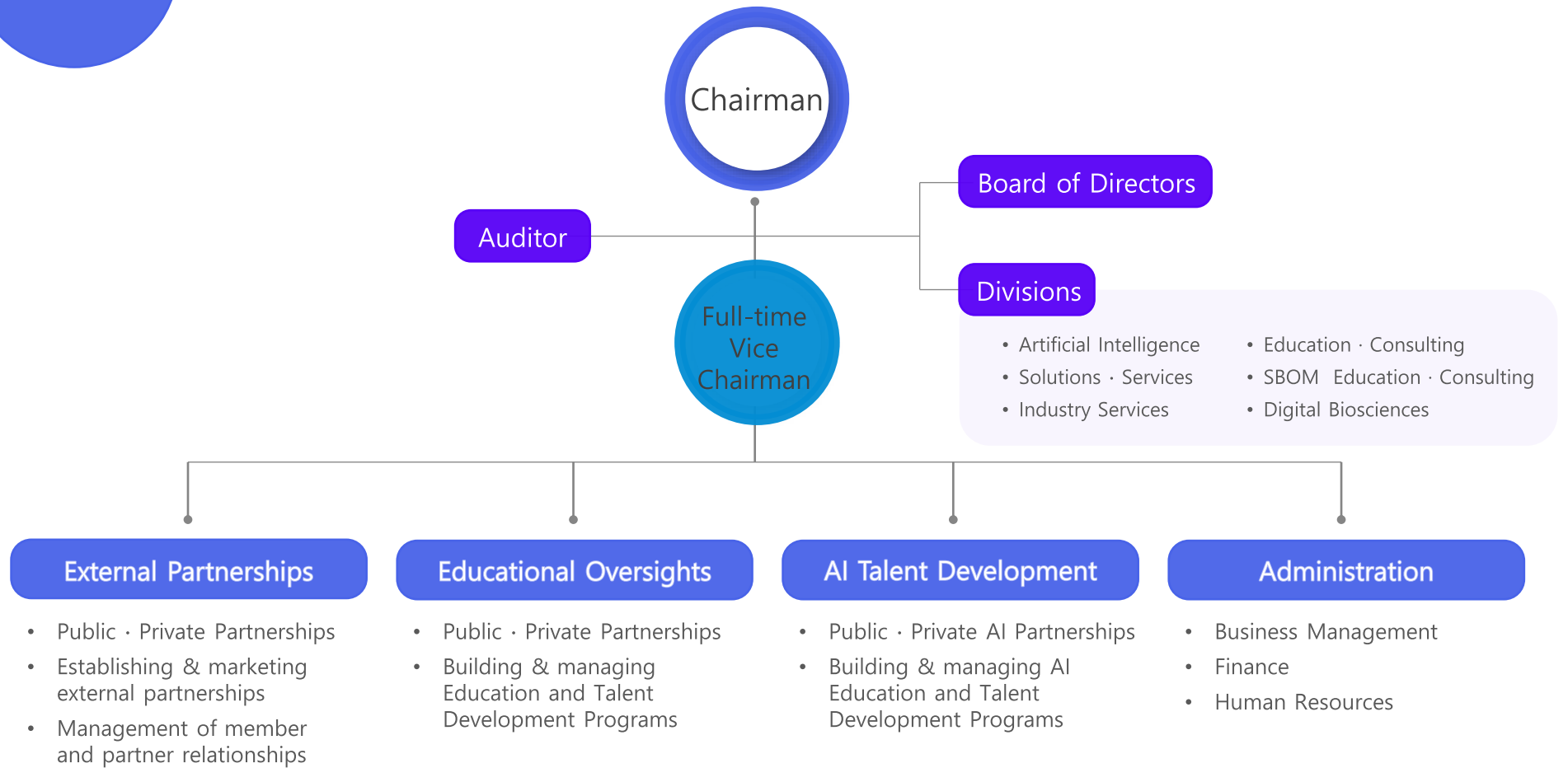
Vitalizing Open-Source Software Market

Vitalizing the open-source software market by resolving vendor lock-in effects and monopolistic practices of proprietary software

Technological Exchange & Joint Marketing

Creating an environment where the performance of open-source software can be enhanced through collaboration among governments, institutions, companies, and communities

Organisational Structure



Head of Association
Shim Ho-Sung
CEO/Full-time Vice Chairman
Email. neider@kossa.kr



Education Partnerships
Kim Hak-June
Head of Education Partnerships
Email. june@kossa.kr



External Partnerships
Kim Sung-Hwan
Head of External Partnerships
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01

Introduction

Organisational History

Korea Open-Source Software Association (KOSSA) is Leading Innovation in a Changing World with Open-Source

1999

Korea Linux Users' Association Founded

- Operated open-source SW-specialized consulting group
- Operated an open-source SW-specialized education business
- Operated an open-source SW competition
- Developed WG2 model curriculum for Korea Open-Source Software Activation Forum

2006

Incorporated as Korea Open-Source Software Association

- Opened and operated Open-Source Software Education Centre
- Promoted research on a fixed-fee system and procurement registration for open-source SW
- Operated a cloud forum and established a cloud council
- Supported Mongolian IT projects and finalized an agreement with US patent management organization OIN
- Operated the Korea Open-Source SW Activation Forum WG4
- Hosed Open-Source Biz-Eco Conference
- Held meetings with regional organizations and companies to promote open-source SW
- Operated an open-source SW developers' contest

2011

- Operated the Open-Source Software Education Center
- Selected as a partner institution for National Human Resources Consortium to operate its education program
- Participated in national research and development projects on many-core and OpenHolo.
- Participated in research improving the implementation of industry-oriented open-source SW development
- Proposed policies to improve the open-source SW ecosystem
- Founded SWRC Forum and hosted 4th C&O Conference.
- Hosted Korea Financial Investment Association's CIO Forum
- Held seminars on open-source success stories
- Hosted a conference on safe open-source usage and adoption strategies.
- Operated financial education programs as part of the Korea Financial Investment Association consortium's
- Operated open-source software license legal consulting
- Operated a program to enhance aspiring developers' capabilities in open-source software
- (incl. open-source software developer contests and military personnel capability enhancement education)

2021

- Operated the Open-Source Software Education Center
- Published 2022 Open-Source companies directory
- Supported discovery & training of open-source talents
- Proposed policies to improve the open-source SW ecosystem
- Participated in national research and development projects on many-core and OpenHolo.
- Participated in research on SBOM analysis based on an integrated development framework
- Operated open-source software license legal consulting and education
- Hosted a conference on safe open-source usage and adoption strategies.
- Operated a program to enhance aspiring developers' capabilities in open-source software
- (incl. open-source software developer contests and military personnel capability enhancement education)
- Hosted a Metaverse Developer Competition.

2024 Now

- 16th President inaugurated - (Kim Taek-wan, representative of OSBC Co., Ltd.).
- Operated the Open-Source Software Education Center
- Published 2023 Open-Source companies directory
- Established an online platform for open-source (OSS) company information.
- Supported discovery & training of open-source talents
- Proposed policies to improve the open-source SW ecosystem
- Participated in national research and development projects on many-core and OpenHolo.
- Participated in research on SBOM analysis based on an integrated development framework
- Operated a program to enhance aspiring developers' capabilities in open-source software
- (incl. open-source software developer contests and military personnel capability enhancement education)
- Operated a low-code/ no-code policy research project.
- Operated the Korea-China-Japan open-source SW Exchange forum

Specialized Divisions



Unleashing Innovation in Industries Around the World **K-OpenSource**

K-OpenSource is...

(1) KOSSA's proprietary brand proposing new open-source projects by connecting companies and experts. The organization aims for 1. Open-Source led by Korea, 2. Connection with industry and regional economies 3. Contributing to innovation in developer culture

(2) Conceptualized to be a global business platform to 1. Introduce companies and experts based on project proposals made through industry-focused "reference architecture" and 2. To provide information search and documentation functions using generative AI

K-OpenSourceX(Global Conference)

- Introducing success stories and cutting-edge developments in AI, Cloud etc.
- Venue for borderless exchange among Open-Source companies
- Collaboration with major global organizations



Connecting suppliers to customers

K-OpenSourceX

Collaboration Seminar & Conferences

To create tangible business opportunities

Open-Source Success Story Seminar

Creating tangible opportunities for open-source SW by 1. Introducing supplier-side technology, services and implementation know-how and 2. Advancing demand-side capability for adoption

- 1st : System SW Adoption Case Study ('17.5)
- 2nd : Open-Source Application & SW Adoption Case Study ('17.7)
- 3rd : Adoption of Open-Source Governance ('17.12)
- 4th : Open-Source SW, Keyword of Competitiveness & Synergy ('18.12)
- 5th : Business Proposal Centred on Member Companies ('23.9)



To create tangible business opportunities and secure competitiveness

Conference on Strategy for Safe Use and Adoption of Open-Source SW

Creating tangible opportunities for open-source SW by 1. Introducing supplier-side technology, services and implementation know-how and 2. Advancing demand-side capability for adoption

- 1st Conference on Strategy for Safe Use and Adoption of Open-Source ('19.7)



Data Services

Publication of Company Information Directory and Online Companies Listing

White paper for open-source companies deal origination

Open-Source SW Companies Directory

Purpose

- Providing information to facilitate smooth contracting processes for public SW projects
- Produced in collab. With Procurement Authorities' Association and Government Communication Technology Council

Details

- Provides information on companies providing support per-resolution / per-service
- 110+ open-source SW companies listed

Open-Source SW Companies Directory 2023

- Published August 2023
- Distributed across 500+ governmental & public agencies



Open-Source Companies Listing & Information Management System:

Ogijung.com (ogijung.com)



Ogijung.com (ogijung.com)

Details

- Since August 2023
- Providing information on major domestic open-source companies and services
- Promotion and guidance for major open-source events



Policy Proposals and Research (1/3)

Public Research Projects and Investigative Analyses

To promote industrial use and vitalization of open-source SW:

Research on Open-Source SW R&D System & Global SW Supply Chain

- Research to improve implementation system for industry-oriented open-source SW technology development
- Research on SBOM analysis based on an integrated development framework
- Development of Graph DBMS technology for intelligent, high-speed processing of massive graphs
- Research on the status of low-code / no-code technologies and strategies to spread developer culture



Connecting SW Companies to Open-Source SW R&D Project Outcomes

- Participated in Next-Generation OS Research Centre's "many-core based ultra-high performance scalable OS" research project including having company visits to KTDS, Seegene for collaboration





Policy Proposals

Holding open-source SW conferences, forums and seminars to gather member company & partner opinions to generate informed policy proposals to vitalize the open-source ecosystem

Supporting Various Industries

Serving as the catalyst for talent development, skill-building education and business opportunity provision

Public

Finance

Biosciences

Defence

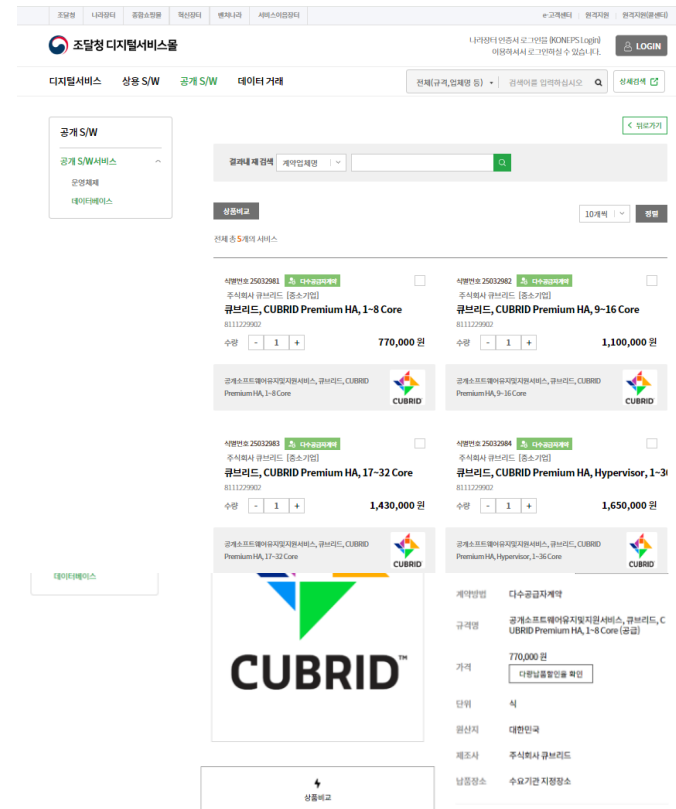
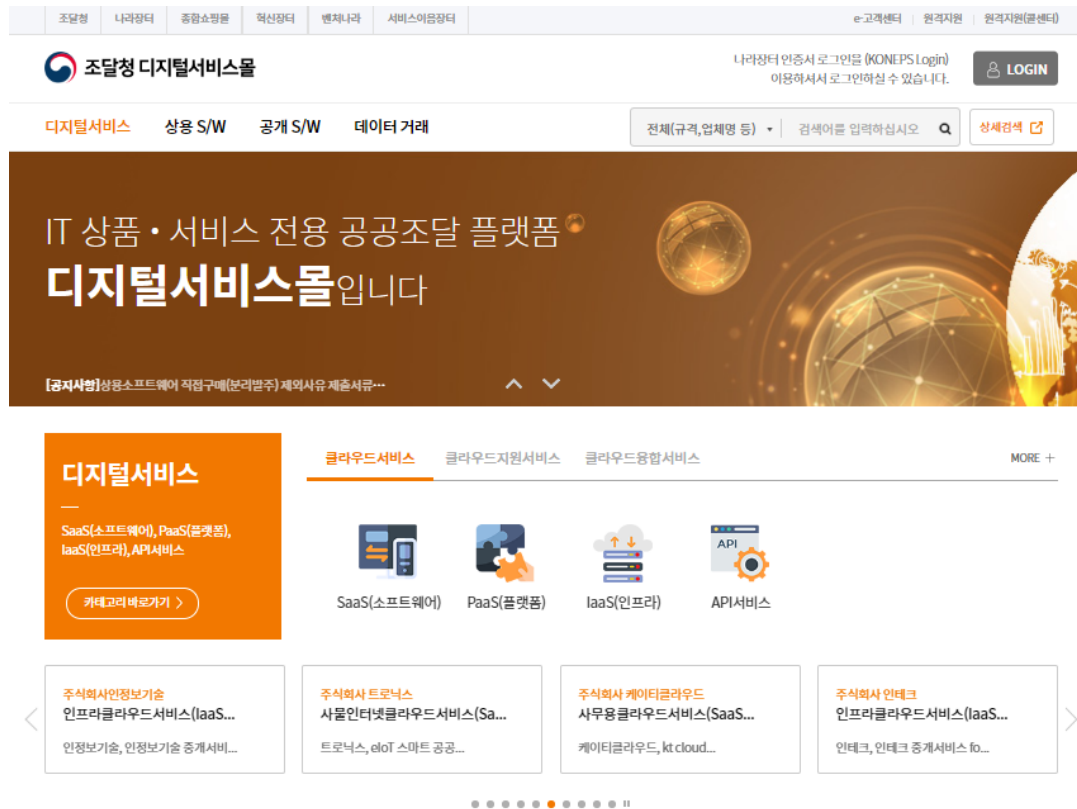
Media

Distribution



Entry into Public Open-source SW Procurement Market

- Collected pinions through corporate and procurement agency public hearings('21.11.10.)
- Posted public notice for open-source SW procurement registration ('21.12.31.)
- Completed first contract in open-source SW with CUBRID (MAS, '23.9.22.)



On-Offline Education Platform

OLC CENTER

Beginner-Level Developer

Hands-on Capability Training

For beginner developers & lecturers in open-source

Introduction to Open-Source

Client-centric education

Providing step-by-step SW education content, tailored to skill levels of participants to nurture practical talents

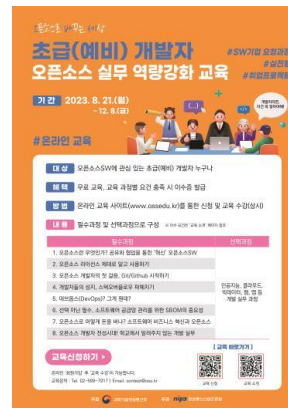
- Providing the latest open-source education
- Open-source academy for university & specialized high school students
- Practical / advanced courses for CS students & developers
- Practical courses for non-CS students & public



Beginner hands-on training

Online education based on real open-source skill set demand in industry

1,000+ trainees across major universities & companies



Understanding open-source

Enhancing capabilities in open-source SW by providing fundamental knowledge, skills, and information to understand the open-source development process

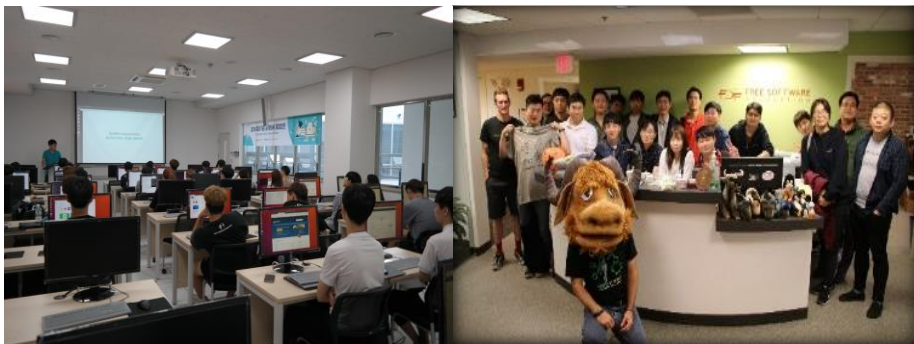


Open-Source Talent Development

Students & Aspiring Developers

Providing opportunities to experience and practice open-source software development to fill in the gaps in university students' formal education, in accordance with the increasing importance of open-source SW

2022	Korea Copyright Commission, open-source license consulting · expert education program (15+ SW-centred university program)
2021	Andong National University, Korea University of Media Arts, Jeju National University, Chungbuk National University
2020	Open-source SW student camp (Jeonbuk National University, Hallym University, Cheongju University, Jeju National University, Korea University of Media Arts, Korea National University of Transport)



Companies & Seasoned Developers

Providing open-source SW license education for companies lacking in SW experts to promote use of open-source SW and advance technological competitiveness

Office Visit	Linux Foundation APAC, Free Software Foundation, Red Hat, Synopsys HQ
Program	Open-source SW License Expert Education, Samsung Electronics – WISET open-source lecture series Korea Copyright Commission, open-source license consulting · expert education program



Contests to Discover and Nurture Digital Talents

Open-SW Signature Competition

Open-SW Developer Competition

Hosted since 2007 to nurture open-source developer talents
4,467 participant teams in 15 years with 1,630 total submissions



Expanding domestic metaverse production landscape and discovering & nurturing top talents

Metaverse Developer Contest

2 seasons of competition hosted since 2021
583 participating teams (1,413 headcount) and 213 submissions (602 headcount)



Education · Competition Programs

Education & Competition Programs for Defense AI · Software Talent Development In South Korea

Fostering a smart, elite military force and industry reserve manpower

Tailored AI & SW expert training for military personnel

Goal of enhancing capabilities and technological receptiveness of key personnel in defence sector AI · SW

Education provided to 72,436 military officers and soldiers('22~'23)

(Lieutenant Training)	Nurturing AI& SW capabilities for use in mission
(Subject Training)	Specialized courses tailored to branches & missions for advance military technology applications
(Promoter Training)	Cultivating practical skills for development of military AI with education across military personnel life cycle
(Tailored Training)	Customized online / offline professional education provided by AI education and research centre



*(24.02) Partnership with ROK Army Logistics Command

Discovering AI Talents for the Future of National Defence

National Defence AI Competition

5 models developed to solve issues in the defence sector

96 key AI talents discovered in the defence sector

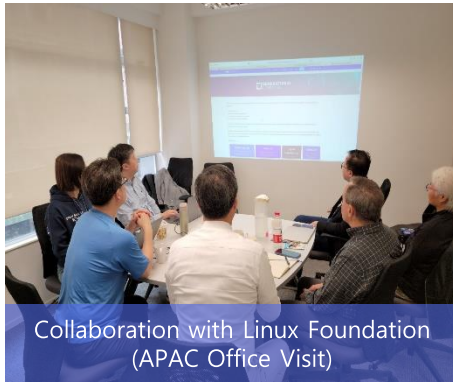


02

Projects

Exchange · Cooperation

Cooperation with Domestic & International Institutions



Collaboration with Linux Foundation
(APAC Office Visit)



Red Hat (Office Visit)



Free Software Foundation (Office
Visit)



Conference on Safe Use & Adoption
of Open-Source (Joint Event with OIN)



Promoting Military Digitalization
(Collab. with ROK Army Logistics
Command)



Nurturing Female Developers
(Collab. With WISET)



Public Procurement Innovation
(Collab. with Public Sector
Procurement Authorities' Association)



Special lectures and collab. with
universities for nurturing digital
talent

03

Members

Members

150+ Actively Participating Member Companies

04

Partnership

Partnerships

60+ University Partners

 가천대학교 Gachon University	 KU 건국대학교 KONKUK UNIV.	 KJU 건양대학교	 경성대학교 KYUNGSUNG UNIVERSITY	 경희대학교 KYUNG HEE UNIVERSITY
 고려대학교 KOREA UNIVERSITY	 광운대학교 KwangWoon University	 국립안동대학교 SW융합교육원	 KMU 국민대학교 KOOKMIN UNIVERSITY	 대전대학교 DAEJEON UNIVERSITY
 동명대학교 TONGMYONG UNIVERSITY	 목원대학교 MOKWON UNIVERSITY	 배재대학교 PAI CHAI UNIVERSITY	 부산대학교 PUSAN NATIONAL UNIVERSITY	 상명대학교 SANGMYUNG UNIVERSITY
 서강대학교 SOGANG UNIVERSITY	 숙명여자대학교 SOOKMYUNG WOMEN'S UNIVERSITY	 숭실대학교 Soongsil University	 연세대학교 YONSEI UNIVERSITY	 영남대학교 Yeungnam University
 전북대학교 JEONBUK NATIONAL UNIVERSITY	 성균관대학교 SUNG KYUNKWAN UNIVERSITY	 전주대학교 JEONJU UNIVERSITY	 제주대학교 JEJU NATIONAL UNIVERSITY	 CAU 중앙대학교 CHUNG-ANG UNIVERSITY
 청주대학교 CHEONGJU UNIVERSITY	 충남대학교 CHUNGNAM NATIONAL UNIVERSITY	 충북대학교 CHUNGBUK NATIONAL UNIVERSITY	 한국교통대학교 KOREA NATIONAL UNIVERSITY OF TRANSPORTATION	 한림대학교 HALLYM UNIVERSITY
 몽골 국립과학기술대학교 (Mongolian University of Science and Technology, MUST)	 한서대학교 HANSEO UNIVERSITY	 가치창출대학 POSTECH POHANG UNIVERSITY OF SCIENCE AND TECHNOLOGY	 KNU 강원대학교	 SW 중심대학협의회



The Korea Open-Source Software Association (KOSSA) is the one-and-only open-source software association in South Korea, established in 1999 and in possession of 150+ member companies.

KOSSA serves as a channel for exchange and cooperation with global open-source organizations and communities, promoting technology-sharing, talent development, and advancement of the open-source ecosystem.

KOSSA is always open to proposals for exchange and collaboration, both domestically and internationally.

CEO/Full-time Vice Chairman

Shim Ho-Sung

Email: neider@kossa.kr

Tel: (+82)10-6205-7097



Current Titles

- Vice Chairman @ Korea Open-Source Software Association
- Secretary-General @ CJK (China-Japan-Korea) Open-Source SW National Forum
- Open-Source SW Strategy Advisor @ Korea Ministry of Science and ICT
- Committee Member @ Korea Ministry of Security and Public Administration Digital Government Public-Private Partnership Forum



Education

Kim Hak-June june@kossa.kr

External

Kim Sung-Hwan ksh@kossa.kr



Korea Open-Source Software Foundation (KOSSA) is actively working towards vitalizing and injecting value to the open source ecosystem, as well as ensuring the growth and flourishing of our member companies