Plenary Session 2: Anticipation and development of skills needed for life and work in the AI era

Chair

Borhene Chakroun is an engineer and has a PhD in Education Sciences from Bourgogne University in France. His academic work focuses on the certification and validation of prior learning. Mr Chakroun worked, during the 1990s, as trainer, chief trainer, VET project manager. He has also worked as short-term consultant for the EU, World Bank and other international organisations before coming to the European Training Foundation (ETF) in 2001. At the ETF, he worked as Senior Human Capital Development specialist and Team leader of the EU funded regional project Education and training for Employment (MEDA-ETE). He has also coordinated the ETF’s community of practice on National Qualifications Frameworks and Recognition of Qualifications. He is now the Director of the Division for Policies and Lifelong Learning Systems, UNESCO.

Keynote Speeches

Carl Benedikt Frey is an Oxford Martin Citi Fellow at Oxford University where he directs the programme on the Future of Work at the Oxford Martin School. He is author of The Technology Trap: Capital, Labor and Power in the Age of Automation. In 2012, he became an Economics Associate of Nuffield College and Senior Fellow at the Institute for New Economic Thinking, both at the University of Oxford. He remains a Senior Fellow of the Department of Economic History at Lund University, and a Fellow of the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA).

Mr Frey has served as an advisor and consultant to international organisations, think tanks, government and business, including the G20, the OECD, the European Commission, the United Nations, and several Fortune 500 companies. He is also an op-ed contributor to the Financial Times, Scientific American, and the Wall Street Journal, where he has written on the economics of artificial intelligence, the history of technology, and the future of work. In addition, his academic work has featured in over 100 media outlets, including The Economist, Foreign Affairs, New York Times, Time Magazine, Le Monde, and Frankfurter Allgemeine Zeitung. In 2016, he was named the 2nd most influential young opinion leader by the Swedish business magazine Veckans Affärer.
Panelists

**Nathalie Smuha** works at the European Commission (DG for Communications Networks, Content and Technology), where she is responsible for ethical and legal matters relating to Artificial Intelligence. She is the coordinator of the High-Level Expert Group on Artificial Intelligence, which drafted the European Ethics Guidelines for Trustworthy AI. Nathalie is also associated with the Faculty of Law of the KU Leuven (Department of International and European Law) where she conducts research on the governance and regulation of AI and other new technologies, as well their impact on fundamental rights.

Ms Smuha holds a Master of Laws with specialisation in International and European law, as well as a degree in Philosophy from the KU Leuven. She also pursued an LL.M. at the University of Chicago Law School, after which she qualified at the New York Bar. After completing her studies, Ms Smuha worked as a lawyer in an international law firm in Brussels, advising companies on EU competition law and EU regulation more generally.

**Irene Zhou** is presently Labour Law Specialist in the ILO Country Office for China and Mongolia. Her main responsibilities include research on the new forms of work and provision of advice on the effects and role of labour laws as institutions for effective labour market governance and for the pursuit of a wide range of labour market policy goals within the framework of international labour standards. Prior to joining the ILO in September 2018, Ms Zhou worked in the Canadian federal public service for over twenty years where she served in different capacities including Deputy Director for international labour affairs, manager for dispute resolution services at Federal Mediation and Conciliation Service and Senior Policy Advisor for strategic policy, analysis and workplace information directorate, Employment and Social Development Canada. She was Canadian government spokesperson for a number of ILO-related issues including transition from the informal to the formal economy, fundamental principles and rights at work and decent work in global supply chains.

**Gary Gan** is an experienced entrepreneur and marketer, involved in the startup of several successful companies across a broad spectrum of industries. Gary was previously Head of Marketing and Business Development at TradeHero, a stock trading mobile app that raised US$10 million from Kleiner Perkins and was acquired by Ayondo. He is currently co-founder of JobKred, a career development platform that uses AI and data science to help people close their skills gaps and navigate the future of work. Mr Gan has been invited to speak at conferences such as Asian Development Bank’s Skills Forum 2017, World Bank Annual Meeting 2018, NTUC’s Shaping Careers and Channel NewsAsia Singapore Tonight, on entrepreneurship, AI and the future of work.
François Taddei is the Co-Founder of the Director of the Center for Interdisciplinary Research (CRI). Since 2000 Mr Taddei heads the ‘Evolutionary Systems Biology’ research team. The CRI opens the boundaries between disciplines promoting excellence and generating inspiration.

The CRI is committed to creating a positive and inclusive future and determined to mobilize collective intelligence to promote a learning society. He is a graduate of Ecole Polytechnique and holds a PhD in Genetics.

Breakout Sessions

2.1: Anticipating the future of work and defining an AI skills framework

Chair

Claudia Uribe is the Director of the UNESCO Regional Bureau for Education in Latin America and the Caribbean since March 2018. She has an extensive career in education and international development. She has dedicated her career to working with Ministries of Education, schools, teachers and communities for the improvement of education systems and educational opportunities for all. She has worked with governments, NGO’s and international organizations including the World Bank, the Inter-American Development Bank, the Harvard Institute for International Development. She holds a Master’s degree and Doctorate in Education from Harvard University. She is a native of Colombia.

Panelists

Hon. Ms Claudiana Ayo Cole is the current Minister of Basic and Secondary Education in Gambia, and become so following the inauguration of President Adama Barrow 2017. Hon. Ms Cole was a member of the Senior Management Team of the Ministry and as a director, since 2008 prior to her taking the top office. She was appointed as teacher in 1981 and from 2002 she has served as a senior education administrator. After graduation in 1981, Hon. Ms Cole spent the next 26 years working in the field as a teacher then headmistress, before making her way into educational administration. She was seconded to the African Women Educationalists Gambia Chapter (FAWEGAM) as Senior Education officer. She then rose to become Principal Education Officer in Region Six, Basse. As the longest-serving educationist in more than three decades, she is known for her work on education policy reforms and management of education even in hard to reach areas of the country. Hon. Ms Cole has a Bachelor of Philosophy degree and a Master’s degree in Educational Management from the University of Newcastle Upon Tyne in the United Kingdom.
Konstantinos Pouliakas is an Expert on Skills and Labour Markets at the European Centre for the Development of Vocational Training (Cedefop). He leads Cedefop’s Digitalisation and the Future of Work and Skill Mismatch research agenda and coordinates its country support programmes to improve skills anticipation and matching governance in EU countries. His milestones include the development of two waves of the European Skills and Jobs Survey and conception of the European Skills Index. Mr Pouliakas has been contributor to the World Economic Forum and author of influential policy contributions on skills anticipation/mismatch (Skills Agenda for Europe). Before joining Cedefop he held posts at the University of Aberdeen, the University of Cyprus, the Bank of Greece and HM Treasury. He is Honorary Lecturer at the University of Aberdeen Business School, IZA Research Fellow and has been Invited Professor at Universita Degli Studi Roma TRE and Visiting Research Scholar at the IMF and EIB. He holds an M.Phil from the University of Oxford (St. Antony’s College) and a D.Phil from the Scottish Graduate Program in Economics. He has published widely in peer-reviewed journals of Economics.

Sameer Sharma is currently Senior Advisor at the International Telecommunications Union (ITU) Regional office for Asia-Pacific, Bangkok. He is responsible for sustainable development through ICTs to create digital economies and promote digital connectivity through digital transformation for South Asian countries. Mr Sharma assisted countries in migration from legacy networks to Next Generation Networks, Conformance and Interoperability, Type Approval, Interactive Terrestrial Transmission Map, National Broadband Policy Frameworks and Wireless Broadband Master Plans, IOT, IMT/5G and bridging the standardization gap. He is also the focal point for developing national cybersecurity strategies, and the establishment of CIRT and Child Online Protection (COP). Mr Sharma also worked on digital inclusion and has assisted countries on Emergency Communications Framework and network restoration. Mr. Sharma holds MBA in Telecom Management and Bachelor of Engineering in Electronics and Communications (Honors).

Balaji Venkataraman is the Vice President of Commonwealth of Learning (COL), an Intergovernmental Organization based in Vancouver, Canada. COL was founded by the Commonwealth Heads of Government in 1988 to increase access to quality learning using technology. As the Vice President of COL, Mr Venkataraman is responsible for the management of programmes and activities that deploy innovative and affordable technologies to increase access to learning in several countries of the Commonwealth. His current interests include exploring deployment of AI and the Blockchain in education with special reference to developing countries. Mr Venkataraman is the editor, on behalf of COL, for an upcoming joint publication of UNESCO and COL on AI in education. He holds a PhD and is an Indian national who has been an active researcher in applied IT for nearly three decades.
Ronghuai Huang is a professor at the Faculty of Education at Beijing Normal University. He has been engaged in research on smart learning environments, artificial intelligence in education, educational technology as well as knowledge engineering. He serves as Co-Dean of the Smart Learning Institute, Director of UNESCO International Rural Educational and Training Centre, and Director of China National Engineering Lab for Cyberlearning Intelligent Technology. He is also Committeeman of the Science Subject Expert Committee of the National Textbook Committee, and an expert of the MOE AI Innovation Panel. He is the Editor-in-Chief of Springer’s Journal of Smart Learning Environment and Journal of Computers in Education. Until now, he has accomplished over 100 national, provincial or ministerial level projects, and co-authored around 400 peer-reviewed journals and conference papers as well as over 40 academic books.

2.2: Mainstreaming AI skills development in school and institutional curricula

Chair

Anasse Bouhlal is UNESCO’s Regional Program Specialist in Higher Education for the Arab States. He is Professor at Tampere University AS in Finland since 1998, and previously to this worked in the field in engineering in several positions in Finland, Russia, Sudan and Syria. Mr Bouhlal holds a PhD, and has been visiting Professor in several universities in France (Paris, Bordeaux and le Havre) as well as in Belgium and Singapore. Mr Bouhlal had been very active in the Euro-Med Higher Education activities since the Finnish Presidency 2006, when he organized the first Euro-Med Universities’ Rector Conference in Tampere, Finland. Mr Bouhlal is the co-founder of the Euro-Med University in Slovenia (EMUNI-University) and was selected as Member of its Management Board and Senate. He also worked for the last four years as Director of the Engineering Programs at the Ministry of Higher Education in Muscat, in Oman.

Panelists

Michael Fung is Deputy Chief Executive (Industry), Chief Human Resource Officer, and Chief Data Officer at SkillsFuture Singapore. Mr Fung is responsible for the continuing education and training system in Singapore, oversees the human resource function, and champions data governance, management, and reporting practices. He serves as an adjunct Senior Fellow at the Singapore University of Technology and Design. Mr Fung is also Founding President of the Higher Education Planning in Asia Association, and a board governor of IP Academy Singapore. He is an alumnus of the University of Southern California and Carnegie Mellon University in the US, and Tsinghua University in China.
Hiromichi Katayama works at the Section of Youth, Literacy and Skills Development at the UNESCO headquarters in Paris. He has been working on strengthening evidence-base of UNESCO Strategy for technical and vocational education and training (TVET). He has been coordinating the development of skills assessment and anticipation in the Middle East and North Africa region and TVET management information system in sub-Saharan Africa. He has also coordinated the implementation of a situation analysis of TVET systems in Asia and Africa. Before joining the UNESCO headquarters, he worked at the Organisation for Economic Co-operation and Development in Paris on the analysis of financial literacy of the Programme for International Student Assessment and at the UNESCO Institute for Statistics in Montreal on the collection, analysis and dissemination of TVET data and statistics.

Xu Li is the Co-founder and CEO of SenseTime, a leading Chinese AI unicorn startup. Under his leadership, SenseTime independently developed a deep learning platform and supercomputing centers; launched a wide range of AI technologies including face recognition, image recognition, object recognition, medical image analysis, video analysis, and autonomous driving. Mr Xu obtained his bachelor’s and master’s degrees in computer science from Shanghai Jiao Tong University. He holds a doctor’s degree in computer science from the Chinese University of Hong Kong. He has published more than 50 papers at top international conferences and in journals in the field of computer vision and has won the Best Paper Award at the international conference NPAR 2012 and the Best Reviewer Award at the international conference ACCV (2012) ICCV (2015)

2.3: Upskilling and lifelong learning opportunities for the existing workforce for AI

Panelists

Kelly Shiohira is a Specialist Manager with JET Education Services and focuses on uses of ICT and AI for development and education, monitoring and evaluation, and systemic improvement. In this capacity Ms Shiohira has been instrumental in the design and rollout of teacher and learner ICT-based and blended learning interventions including eMpela, a blended-learning teacher training programme for maths, science and the early grades currently upskilling 1500 teachers in South Africa, and the ICT-based learner program Bridges to the Future Initiative - South Africa2, winner of the 2015 UNESCO prize for literacy. Currently her primary research areas of interest are AI applications for education in crisis, interoperability, and literacy development.

She holds dual Masters Degrees in International Educational Development from the University of Pennsylvania and Linguistics with a specialization in African Language Literacy from Rhodes University.
**Raphael Moraglia**, CEO, Skillogs, France Raphaël Moraglia is an experienced Chief Executive Officer with a demonstrated history of working in the e-learning industry. He is skilled in STEM, Edtech, IT Development, E-learning Implementation, and Big Data Analytics. Mr Moraglia is a strong business development professional with a Bachelor's degree focused in Information Technology from CESI Alternance.

**Davor Miskulin** is the Head of Global Business Development for Burning Glass for more than fifteen years. Burning Glass Technologies is an analytics software company that has cracked the genetic code of an ever-changing labor market. Powered by the world’s largest and most sophisticated database of labor market data and talent, we deliver real-time data and breakthrough planning tools that inform careers, define academic programs, and shape workforces. Previously, he spent seven years as Head of IT for the Slade Group, one of the largest privately-owned recruitment agencies in Australia.

Mr Miskulin holds a Bachelor of Science degree in Mechanical Engineering from the University of Zagreb, Croatia as well as a Graduate Diploma in Applied Information Systems and Master of Business in IT from the RMIT University in Melbourne, Australia. He currently resides with the family in Toronto, Canada.

**CHENG Jiangang** is a professor and Deputy Director of Academic Committee of the Institute of Education at Tsinghua University. He serves as Deputy Director of Academic Committee of China Association for Educational Technology (CAET), President of the Society of International Chinese in Educational Technology (SICET) from 2013 to 2015, Expert Committee member on IT in Education of the Ministry of Education of China, and Editorial Board Director of an international refereed journal, *The Journal of Educational Technology Development and Exchange (JETDE)*. Professor Cheng's research focuses on e-learning and online education for higher education and vocational education. He presided over the codification of *Specifications of Digital Campus Construction for Vocational Colleges and Schools*, which was enacted by Ministry of Education of China in 2015. He leads research and development of TsingHua Education OnLine (THEOL), a learning management system currently implemented by more than 500 universities and colleges with over 800 thousand online courses with daily active users.
2.4: Developing AI professionals and promoting research in AI in higher education

Panelists

Hon. Mr Khaled Abdel-Ghaffar is currently the Minister of Higher Education & Scientific Research, Egypt. He is a Professor of Oral Medicine, Oral Diagnosis, Oral Radiology and Periodontology, Faculty of Dentistry, Ain-Shams University. He was previous Vice President for Postgraduates Studies & Research & Dean of Faculty of Dentistry Ain-Shams University. Within the framework of Egypt’s vision 2030, Hon. Mr Khaled sets the top priorities and endeavours to reform Higher Education in Egypt. His focus is improving the quality and relevance of Higher Education to match with the needs of new learning technologies and human resource development, in parallel to improving the quality and relevance of technical education by establishing new technical universities. In addition to this, Hon. Mr Khaled participates in many international conferences related to Higher Education all over the world in his specialized area. He has 30 international publications and 20 international peer-reviewed publications. He has supervised more than 150 MSc. and Ph.D. researches. Hon. Mr Abdel-Ghaffar received recently an honorary doctorate from University of Hiroshima in Japan for his significant contribution to the field of Higher Education and Scientific Research.

Yang Zongkai is the President of Xi’an University of Electronic Science and Technology, Vice President of the China Society of Educational Development Strategy. He is mainly engaged in education informatization, educational big data, AI in education and other related aspects of research. In 2011, he was invited to serve as the expert group leader of China’s National Plan for ICT in Education (2011-2020). Currently, he is also the director of China’s National Engineering Research Center for E-Learning and China’s National Engineering Laboratory for Educational Big Data, and the Steering Committee for Teaching Informatization and Teaching Methodology Innovation of the Ministry of Education of China.

Stefan Trausan-Matu is teaching and conducting research in Artificial Intelligence (AI) as a Professor at the Computer Science Department of the University Politehnica of Bucharest, Romania. He is also senior researcher and past deputy director at the Romanian Academy Institute of Artificial Intelligence, and full member of the Romanian Scientists Academy. He was a Fulbright Visitor Scholar at Drexel University, Philadelphia, USA, was invited professor and lectured in USA, China, Netherlands, France, Germany, San Marino, Puerto Rico, and more. Mr Trausan-Matu holds a PhD and is a pioneer in Romania in the research of AI, receiving in 2015 the Romanian Academy Award. His research interests are at the confluence of Artificial Intelligence, e-Learning, Philosophy, Sociology, and Linguistics. He conducted 20 PhD AI theses and mentored many other scientists. He has directed and contributed Romanian perspectives in many AI national and international, EU funded, research projects. He has chaired international conferences, has authored or edited 23 books, authored 44 book chapters and more than 425 peer-reviewed papers.
Daniel Burgos works as Vice-rector for Knowledge Transfer & Technology, and is a UNESCO Chair on eLearning and ICDE Chair in OER at Universidad Internacional de La Rioja (UNIR). He is also Director of the Research Institute for Innovation & Technology in Education (UNIR iTED). He contributes to research and implementation projects about, i.e. social entrepreneurship, regional Open Education, clustered Open Education, eLearning, STEM etc., funded by the European Commission and Worldwide. His interests are mainly focused on Educational Technology and Innovation: Adaptive/Personalised and Informal eLearning, Open Education, Learning Analytics, Social Networks, eGames, and eLearning Specifications. He has published over 100 scientific papers and 15 books on these matters. He has been the jury chair of the 2016 and 2018 UNESCO Prize for the Use of ICTs in Education. He holds degrees in Communication (PhD), Computer Science (Dr. Ing), Education (PhD), Anthropology (PhD) and Business Administration (DBA).

Plenary Session 3: Promoting the equitable, inclusive and transparent use of AI in education

Chair

Shigeru Aoyagi is Director of the UNESCO Office in Bangkok and UNESCO Representative to Thailand, Myanmar, Lao People’s Democratic Republic and Singapore in May 2018. He joined UNESCO in July 2002 as Chief of the Literacy and Non-Formal Education (NFE) section in the Education Sector, in Paris. In this capacity, he worked for the Education for All (EFA) programme, as well as its work on Literacy and Non-Formal Education (NFE). He contributed to the adoption of the UN resolution on the United Nations Literacy Decade (UNLD) International Plan of Action, coordinated the EFA Flagship programmes on UNLD and the UNESCO/FAO joint programme on Rural People, and developed the UNESCO’s flagship programme of Literacy Initiative for Empowerment (LIFE) for the 35 countries in the world. Mr Aoyagi has been Director of the UNESCO office in Kabul, and New Delhi from December 2006 to MAY 2018. He initiated a large scale literacy project of Empowerment of Literacy in Afghanistan (ELA) in collaboration with Afghan and Japanese Governments to improve the level of literacy, numeracy and vocational skills of one million Afghan youth and adults.

Panelists

N. Saravana Kumar is a Joint Secretary in the Ministry of Human Resource Development. He is in charge of International Cooperation, ICT initiatives in Education, and Education Policy, as well as UNESCO and Teacher Training aspects. He plays a key role in improving the international collaboration and also policy issues in the education sector, including schools and higher education. He is in charge of flagship schemes like Study in India, Scheme for Promotion of Academic & Research Collaboration (SPARC), Unnat Bharat Abhiyan. As a Mission Director of National Mission on Education through ICT (NMEICT), a flagship programme, he is spearheading the various ICT initiatives in the education sector including SWAYAM, India’s own MOOCs platform, National Digital Library, Operation Digital Board – a smart classroom. He is the Mission Director of the scheme Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching for professional development of teachers including the higher education faculty. He is the Deputy Secretary General of National Commission of UNESCO for India. He is a senior bureaucrat with an experience of 18 years, both in Government of India and Bihar State.
Ivana Bartoletti is Head of Privacy and Data Ethics at Gemserv, a keynote speaker and media commentator in the UK and overseas. In her day job, Ms Bartoletti helps businesses with their privacy by design programmes especially in relation to artificial intelligence (AI) and blockchain technology. In May 2018, Ms Bartoletti launched the Women Leading in AI network, an international lobby group of women advocating for responsible AI. The network’s 2018 report garnered mass interest from tech leaders, international institutions and the media. A regular contributor to media platforms, Ms Bartoletti comments on privacy, data ethics and innovation for international programmes and publications, including the Victoria Derbyshire programme, BBC, the Telegraph and the Guardian. Co-editor of the Fintech Circle’s AI book, the first major publication focused on how AI is reshaping financial services, she is also writing her own publication expected to be released next year.

Wu Zhaohui was named president of Zhejiang University in March 2015. He is an alternate member of the 19th Central Committee of Communist Party of China. He was elected as the member of Chinese Academy of Sciences in 2017. Mr Zhaohui is a fellow of IEEE, China Computer Federation, Chinese Association for Artificial Intelligence and Chinese Association of Automation. He also serves as director of the National Panel of Modern Service Industry, Vice President of the China Association of Higher Education, and Vice President of the Chinese Health Information and Big Data Association. Mr Zhaohui’s major research is focused on computer science and technology. He was a chief scientist in the 973 Project and an information expert in the 863 Project. He was also a winner of the National Fund for Distinguished Young Scientists, a first-tier talent in the National Talents Program, the second-prize winner of the State Technological Invention Award, and the second-prize winner of the State Scientific & Technological Progress Award.

Breakout Sessions

3.1: Promoting human-centred and responsible AI for education and learning

Chair

Roy Saurabh is the CTO at UNESCO MGIEP with 14+ years of experience in Data Sciences, specifically in the context of capacity building within diverse global learners’ community. At UNESCO MGIEP, Mr Saurabh is responsible for architcting the AI-powered indigenously developed platform CHI (Collective Human Intelligence) that explores the role of AI in individualized learning and inclusion of digital learning in the field of education. In this position, Roy drives evangelization of data sciences by communicating the clear vision and relevant use cases leveraging advanced optimized models within the global education ecosystem. Before UNESCO MGIEP, he was heading the Skill Development Mission’s technology team actively exploring AI models to help facilitate proactive interventions, impacting more than 25 million learners.
Panelists

Joe Guan leads the public policy agenda for the Greater China region, such as engagements with governments and regulators as well as outreach to institutions and think-tanks. He advocates for members’ common interests, provides expert advice on policymaking and thought leadership to the evolution of policies and regulations. He is also active in capacity building and policy debates at regional and international forums. Previously, he led the GSMA spectrum policy programme for the Asia Pacific region. Before joining the GSMA, Mr Guan worked for the New Zealand Ministry of Business, Innovation and Employment. He was heavily involved in the development of the New Zealand government’s online register of radio frequencies and its online spectrum licensing and compliance systems.

Mr Guan has a bachelor’s degree in engineering from the University of Auckland in New Zealand, specialised in radio engineering and digital signal processing. He is also a certified PRINCE2 practitioner with many experiences in project and programme management.

Avik Sarkar is Professor in Data of AI and Public Policy at the Indian School of Business. Mr Sarkar was most recently heading the Data Analytics Cell at NITI (National Institution for Transforming India) Aayog, a premier policy think-tank of the Government of India. At NITI Aayog, Mr Sarkar was in charge of developing roadmap for use of data, analytics and artificial intelligence for Governance and Policy making along with providing analytical insights for policy making across sectors like Sustainable Development Goals, Direct Benefit Transfer, Innovation, etc. Mr Sarkar has over 18 years of experience across different aspects of data analytics, statistical modeling, data/text mining across companies like IBM, Accenture, Nokia, NASA, Persistent Systems, etc. Mr Sarkar holds a PhD from The Open University (UK), Masters from Indian Institute of Technology (IIT) Bombay and Bachelors from Calcutta University. Dr Sarkar has authored several technical publications and technology patents.

Lionel Brossi is an Assistant Professor and Director of International Relations at the Institute of Communication and image of the University of Chile where he teaches and researches in the fields of youth and digital technologies, education and digital journalism. As a Faculty Associate of the Berkman Klein Center, he is part of the leading team of Conectados al Sur, a multisectoral network focused on the opportunities and challenges that arise to young people, in their relationship with the Internet and emerging technologies in Latin America and the world. As member of the Youth and Media team, he supports ongoing efforts of research and application on the field of Artificial Intelligence and Inclusion and a member of the Millennium Hub to improve the mental health of youth and teenagers in Chile [IMHAY]. He is co-editing the collective book Artificial Intelligence and Youth wellbeing in Latin America (forthcoming 2019).
Maxim Fedorov is the Director of the Skoltech Center for Computational and Data-Intensive Science and Engineering in Russia which hosts two international MSc programs (MSc in Data Science and MSc in Information Science and Technology) and one international PhD program (Computational and Data Science and Engineering). His main research interests are high-performance computing (HPC), Artificial Intelligence (AI) and Data Analytics with a focus on applications of HPC, Big Data and AI in molecular and biomedical sciences. A large part of his activities are currently focused on AI in education and ethical issues related with AI/Big Data technologies. In 2017 he was elected Chair of the Educational Committee of Skolkovo Institute of Science and Technology (Skoltech). He holds a Ph.D. (Candidate of Science) degree and a D.Sc. (Doctor of Science) degree from the Russian Academy of Sciences. He has significant experience in coordinating international projects in scientific computing, applications of modelling techniques to real-world tasks and development of sustainable large-scale e-infrastructure for computational science and engineering.

Zhang Hongjiang is currently the Chairman of Beijing Academy of Artificial Intelligence and a Venture Partner at Sourcecode Capital. He retired on Dec 1, 2016 from the positions of Executive Director and the CEO of Kingsoft (a Hong Kong listed public company). Before Kingsoft, he was the CTO for Microsoft Asia-Pacific Research and Development Group and the Managing Director of the Microsoft Advanced Technology Center. He was also an Assistant Managing Director and a founding member of Microsoft Research Asia and was one of the 10 Microsoft Distinguished Scientists. He also worked at HP Labs and the Institute of Systems Science, National University of Singapore. Mr Zhang is a Fellow of the Institute of Electric and Electronic Engineers (IEEE) and Association of Computing Machines (ACM), and was the recipient of the 2010 IEEE Computer Society Technical Achievement Award, 2012 ACM SIGMM Outstanding Technical Achievement Award, and the winner of 2018 ”Asian-American Engineer of the Year” award. Mr Zhang received a Ph.D. from the Technical University of Denmark, and a Bachelor of Science degree from Zhengzhou University, China.

3.2: Reducing the AI divide in education with Africa priority

Panelists

Hon. Mr Anatole Collinet Makosso has been Minister of Primary, Secondary Education and Literacy since 2015 after having worked in the Ministry of Youth and Civic Education from 2011 to 2015, also serving for both from 2015 to 2016.

He was President of the African Union Conference of Youth Ministers from 2012 to 2014 and of the Specialised Technical Committee on Youth, Culture and Sport from 2014 to 2016. Hon Mr. Makosso was is a teacher and magistrate by training, and holds a doctorate in international criminal law (Paris 2 pantheon Assas), a degree from the ECSR in Paris and the ENAM in Brazzaville. A research professor at the Marien Ngouabi University in Brazzaville, he is president of the Brazzaville University Institute and l’harmattan Congo Publishing, author of several books and publications.
Hon. Mr Afework Kassu Gizaw is State Minister of Science and Higher Education (MoSHE) of the Federal Democratic Republic of Ethiopia since October 2018. He is leading the science, and higher education academic and research issues of the MoSHE. Before joining MoSHE he served as State Minister of Foreign Affairs (May 2018 – Oct 2018) where he led political diplomacy activities of Continental Affairs 2 (the Americas, Europe, Asia and Oceania, and International Organizations Affairs and International Legal Affairs). He also was State Minister of Science and Technology (Oct 2015 – May 2018) where he led Quality and Regulatory Affairs of the Ministry. He also served as Director General for Higher Education Research and Academic Affairs at Federal Ministry of Education from January to October 2015 where he played critical leadership role in higher education research and academic affairs. He served University of Gondar in different capacities from May 1994 to September 2014, including as vice president for Research and Community Services. He has been transferred to Department of Microbiology, Immunology and Parasitology, School of Medicine, College of Health Sciences of Addis Ababa University since October 2014 and serving as Professor of Medical Microbiology and Immunology.

Hon. Mr Alton V. Kesselly is the Deputy Minister for Planning, Research and Development at the Ministry of Education of the Republic of Liberia. He is responsible for supervising key activities at the Ministry of Education. Honorable Kesselly also serve as the principal liaison between the Ministry of Education and all development partners, donor communities, as well as domestic and external institutions involved in education. He also prepares the budget and annual report for the Ministry of Education. Hon. Mr Kesselly has served as the Executive Director for the Liberian Institute for Science Technology Engineering and Mathematics (LISTEM), a local Liberian NGO involved in the promotion of STEM education and research activities in Liberia. He has also taught Physics and Mathematics at both High School and University levels for many years.

Hon. Mr Kesselly has a Master’s in Applied Mathematics from the University of Cape Town, a Master’s in Mathematical Sciences from the African Institute for Mathematical Sciences, Cape Town, and a Master’s in Astrophysics from the University of Science and Technology of China.

Hon. Ms Kandjii-Murangi, Itah is currently serving as  the Minister of Higher Education Training and Innovation in the Republic of Namibia. Kandjii-Murangi attained her first Bachelor’s degree in educational psychology from the University of Botswana (1982), Lesotho and Swaziland in Gaborone, Botswana. She proceeded to do a Master’s degree in Counseling Psychology with emphasis on Career Guidance at the University of Ohio, Athens, U.S.A. (1985), where she also subsequently obtained a Doctoral degree in Clinical Psychology (1990).

For her academic and professional life of over three decades, Kandjii-Murangi taught psychology at both the Universities of Botswana and Namibia. She also served in other capacities at the University of Namibia: the Founding Director of International Relations and Exchange Programs and Dean of Students and International Programs. While at UNAM, Kandjii-Murangi studied and completed a Master’s degree in Public Policy and Administration (2000) and a B. Juris degree (2012).
Hon. Mr Emery Okundji Ndjovu is currently the Minister of Posts, Telecommunications and new Technologies of Information and Communication, as well as the Minister of Primary, Secondary and Vocational Education a.i., of the Democratic Republic of the Congo. He has been a member of parliament from 2004 to 2011. He holds a degree from ITA/GEMENA (1985), a bachelor’s in Law from the Pan-African University of the Democratic Republic of the Congo (2014), and a Master’s in Law (2016).

Hon. Mr Khaled Abdel-Ghaffar is currently the Minister of Higher Education & Scientific Research, Egypt. He is a Professor of Oral Medicine, Oral Diagnosis, Oral Radiology and Periodontology, Faculty of Dentistry, Ain-Shams University. He was previous Vice President for Postgraduates Studies & Research & Dean of Faculty of Dentistry Ain-Shams University. Within the framework of Egypt’s vision 2030, Hon. Mr Khaled sets the top priorities and endeavours to reform Higher Education in Egypt. His focus is improving the quality and relevance of Higher Education to match with the needs of new learning technologies and human resource development, in parallel to improving the quality and relevance of technical education by establishing new technical universities. In addition to this, Hon. Mr Khaled participates in many international conferences related to Higher Education all over the world in his specialized area. He has 30 international publications and 20 international peer-reviewed publications. He has supervised more than 150 MSc. and Ph.D. researches. Hon. Mr Abdel-Ghaffar received recently an honorary doctorate from University of Hiroshima in Japan for his significant contribution to the field of Higher Education and Scientific Research.

Hon. Mr Yaw Osei Adutwum is the Member of Parliament for Bosomtwe and the Deputy Minister of Education in charge of General Education for the Republic of Ghana. He assumed this position in March 2017. Prior to this, he served as the Chief Executive Officer of New Designs Educational Group (NDEG) based in Los Angeles, California in the United States. Through NDEG, he founded and led the New Designs Charter Schools that served students in Los Angeles. He holds a PhD in Education Policy and Administration from the University of Southern California and a Masters in Education Management from University of La Verne in California. His undergraduate degree in Land Economy was completed at the Kwame Nkrumah University of Science and Technology in Ghana.
3.3: Promoting gender equality and empowerment of women in AI

Chair

**Saniye Gülser Corat** is currently the Director for Gender Equality at UNESCO, she was the pioneer in making gender equality a global priority at UNESCO in 2007. She is a senior executive in international development with over 25 years of field experience in over 30 countries in Asia-Pacific, North and Sub-Saharan Africa, Central and South America, Europe, and North America.

She holds post-graduate degrees from Harvard Kennedy School and Harvard Business School and graduate degrees from the College of Europe in Bruges, Belgium; Norman Paterson School of International Affairs and Political Science Department at Carleton University in Ottawa, Canada.

**Hon. Ms Gulmira Kudayberdieva** is the Minister of Education and Science in Kyrgyzstan since November 2016. She worked for the government office as an expert in the department of Education and Culture from 2010 to 2012, before working as Head of the Social Policy department for the Office of the President from 2012-2015. Before her current position, she was Deputy Prime Minister of Kyrgyzstan for one year. Before her days in government, Hon. Ms Kudayberdieva worked as a teacher and worked on the ADB project of ‘development of the education system’ in Kyrgyzstan. She holds a degree from the State University of Kyrgyzstan, Ishenala Arabaieva.

**Hon. Ms Khanthaly Siriphogphanh** is currently a Vice-Minister of Education and Sports in Lao People’s Democratic Republic. She is in charge of the Inspection in Education and Sports Sector as a Chief. She also acts as a Vice Chair of Commission for the Advancement of Women, Mother and Child.

Hon Ms Khanthaly Siriphongphanh received her Bachelor’s Degree in Psychology in 1985. She also gained a Master’s Degree in Education and Administration from National University of Laos in 2010. She started her work as a teacher of Political Economy in Polytechnic University, Vientiane Capital from 1985 to1995. From 1999 to 2006, she was a Deputy Director General of Department of General Education. In addition, she was also a Director of Basic Education Girls Project. Then, she was promoted to be a Director-General of Department of Inspection from 2006 to 2017 and later was appointed to be a Permanent Secretary, Ministry of Education and Sports in 2017.

**Ms Ethel Agnes Pascua-Valenzuela** is presently the Director of the Southeast Asian Ministers of Education Organization (SEAMEO) Secretariat, the first female Director since SEAMEO was organized in 1965. She served as Deputy Director for Programme and Development of SEAMEO Secretariat from July 2015 to March 2019 and led the Educational Research and Innovation Office of SEAMEO INNOTECH, from 2006 to June 2015. Prior to joining SEAMEO, she was UNESCO Education Commissioner and Director for International Affairs and Student Services at the Commission on Higher Education Philippines and was responsible for foreign and local scholarship programs and academic mobility. Ms Valenzuela’s expertise is on internationalization of higher
education and transnational education, teacher education, alternative learning and secondary education. She has published international and local articles, journals, technical reports and guidelines for some SEAMEO and other international organizations such as UNESCO, UNICEF, CHED and DepED.

Ms Valenzuela holds Doctor of Education in Educational Management and a Career Executive Service Officer IV rank (CESO IV) in the Philippine Government. She is a member of various international professional and academic organizations including the Phi Lambda Theta Honor Society of Women Leaders in Education and the Phi Delta Kappa. She was awarded as Philippine Normal University’s Blue Ribbon Award for Distinguished Alumni in 2013, and a World Bank Fellow in Multilingual Education.

3.4: Leveraging AI to promote inclusion and equity in education

Chair

Natalia Amelina is Chief of Unit for Teacher Professional Development and Networking at the UNESCO Institute for information technologies in education (IITE). Ms Amelina holds a PhD and is connected with studying, analyses and development of training materials and recommendations on various trends of ICT use in educational process, including the use of ICT for people with disabilities, ICT in preschool and primary school education, ICT for skills development, ICT for TVET, and more. She has experience of more than 20 years in pedagogics. Ms Amelina is an author of more than 30 publications in the field of education. Working at the IITE for more than 15 years, Ms Amelina participated in the international projects, and as the expert and the co-author of training materials, she took part and organized many international and national conferences, carried out a large number of meetings and training seminars on promoting ICT in education.

John Walubengo is a lecturer at Multimedia University of Kenya. He has over 20 years of experience in the ICT Training and Consulting. His work experience included working for the Strathmore University as the IT Course Director and as the founding Dean, Faculty of Computing at the Multimedia University. He is currently a PhD candidate at the University of Nairobi and continues to provide Consultancy services to Government and other organisations. Most recently, he was appointed a member of two critical Taskforces looking into emerging technologies and policies. These are the National TaskForce on Blockchain & Artificial Intelligence as well as the Data Protection Taskforce respectively. He also writes a weekly column on topical ICT issues in one of the largest dailies in East and Central Africa. Mr Walubengo holds an MSc in Strategic Business IT (University of Portsmouth) and a BSc in Mathematics (Kenyatta University). He holds several industry certifications including the CCNA (Certified Cisco Network Associate) and the CISA (Certified Information Systems Auditor) certification. His area of specialisation is in ICT Governance, Security, Policy & Strategy.
**Shadi Abou-Zahra** works with the W3C Web Accessibility Initiative (WAI) as the Accessibility Strategy and Technology Specialist. He coordinates accessibility priorities in the W3C Strategy team, as well as international promotion, coordination, and harmonization of web accessibility standards. Mr Abou-Zahra also maintains WAI liaisons with key stakeholders including disability, research, and standards organizations, as well as coordinates WAI outreach in Europe, accessibility evaluation techniques, and European-funded projects on accessibility.

**Gail Wong Yeng Hoong**, is Senior Vice President, Corporate Development with Limkokwing University of Creative Technology with its headquarters in Malaysia. Limkokwing University is recognized as a global TVET model university and has campuses and centers in 12 countries in Asia, UK, and Africa. Having worked in the Limkokwing University Worldwide for more than 30 years, she has extensive experience working with government agencies, authorities and universities in setting up international off-shore campuses and transnational partnerships that are mutually beneficial to both the University and respective partners in the area of education and TVET skills training. Her management portfolio includes international corporate development and government liaison especially in Africa where the university has 5 campuses in Botswana, Lesotho, Eswatini, Sierra Leone and Uganda. Her experience has helped her to adapt to working within a multi cultural environment and leverage on the advantages such an environment offers. She holds a Masters in Education (Management Leadership) from RMIT Australia.