- **Name: Munkhbayar Adiya**

- **Education – degree, discipline, institution, year:**
  Ph.D: Systems innovation engineering, Tokushima University, Japan, 2020
  MSc: Telecommunication engineer, School of Information and Communication Technology (SICT), Mongolian University of Science and Technology (MUST), 2014
  BSc: Telecommunication engineer, School of Information and Communication Technology (SICT), Mongolian University of Science and Technology (MUST), 2011

- **Academic experience – institution, rank, title (chair, coordinator, etc. if appropriate), when (ex. 1990-1995), full time or part time:**
  2022-present: Senior Lecturer, School of Information and Communication Technology, Mongolian University of Science and Technology, full-time;
  2015-2022: Lecturer, School of Information and Communication Technology, Mongolian University of Science and Technology, full-time;
  2014-2015: Assistant teacher, School of Information and Communication Technology, Mongolian University of Science and Technology, full-time;
  2013-2014: Network engineer, School of Information and Communication Technology, Mongolian University of Science and Technology, full-time;
  2012-2013: Research student, Sejong University, South Korea, full time;
  2011-2012: Lecturer, School of Information and Communication Technology, Mongolian University of Science and Technology, part-time;

- **Non-academic experience – company or entity, title, brief description of position, when (ex. 1993-1999), full time or part time**
  None.

- **Certifications or professional registrations**
  None.

- **Current membership in professional organizations:**
  None.

- **Honors and awards:**
  - Credentials of Communications Regulatory Commission of Mongolia, 2022
  - Second place of Conference on school of information and communication technology for master students, 2012.
  - Bronze medal of Asian championship (International Taekwon-Do Federation), 2012.
  - Gold medal of Asian championship (International Taekwon-Do Federation), 2010.
  - Silver medal of Asian championship (International Taekwon-Do Federation), 2010.
  - Best worker of field of physical culture, 2010. (Government awards)
- **Service activities (within and outside of the institution)**
  - none
- **Briefly list the most important publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation (selected)**

- ✓ **Journal paper**
  - Yi-Lin Yu, Hiroki Kishikawa, Shien-Kuei Liaw, Munkhbayar Adiya, Nobuo Goto, "Broadband silicon core photonics crystal fiber polarization filter based on surface plasmon resonance effect" , Optics Communications, 482, 2021
  - Munkhbayar Adiya, Hiroki Kishikawa, Nobuo Goto and Ganbold Shagdar, "8-ary OAM shift keying for free-space optical communication system", Optical Engineering, OE191432, 2019.
  - Munkhbayar Adiya, Nyam-Erdene Odbayar, Hiroki Kishikawa, Nobuo Goto and Ganbold Shagdar, "Waveguide-Type Optical Circuits for Recognition of Optical 8PSKCoded Labels", Japanese Journal of Applied Physics, Part 1 (Special Issues), Vol.58, No.SJ, SJJA01-1-SJJA01-8, 2019
- ✓ **Conference paper**
  - Dolgorsuren Dulamjav, Munkhbayar Adiya, Hiroki Kishikawa and Buyankhishig Zundui, "Orbital Angular Momentum Shift Keying (OAM-SK) with time-Spacing for FSO", 27th MicroOptics Conference (MOC2022), Jena, Germany, No.P-1045, Sep. 2022.
  - Munkhbyar Adiya, Hiroki Kishikawa and Nobuo Goto, "Optical signal transmission with 8-ary OAM shift keying through the FSO communication link with phase distortion, 6th International Forum on Advanced Technologies March 9th-10 th, 2020,Tokushima, Japan
  - Munkhbayar Khurelbaatar, Munkhbayar Adiya, Hiroki Kishikawa and Nobuo Goto, "Atmospheric turbulence effects on LG-beam based OAM transmission for OAM shift keying", 5th International Forum on Advanced Technologies (IFAT2019), No.FS32, Taipei, Mar. 2019.
  - Munkhbayar Adiya, Nyam-Erdene Odbayar, Hiroki Kishikawa and Nobuo Goto, "Proposal of Integrated-Optical Circuit for Recognition of 8PSK-Coded", European Conf. on Integrated Optics (ECIO2019), No.W.Po1.29, Ghent, Belgium, Apr. 2019.
  - Munkhbayar Adiya, Hiroki Kishikawa and Nobuo Goto, "8-ary OAM shift keying for FSO link with atmospheric turbulence", OSA 2019 Advanced Photonics Congress (AP2019), San Francisco, No.SpTh3E.6, Jul. 2019.
  - Munkhbayar Adiya, Hiroki Kishikawa and Nobuo Goto, "Efficient decoding method for M-ary OAM shift keying in FSO link", 24th MicroOptics Conference (MOC2019), Toyama, No.P-45, Toyama, Nov. 2019.
  - Munkhbayar Adiya, Hiroki Kishikawa and Nobuo Goto, "8-ary Orbital Angular Momentum Shift Keying Using 8PSK Recognition Circuit for FSO Communication", OSA Advanced Photonics Congress 2018, No.SpTh3G.4, Zurich, Switzerland, Jul. 2018.
  - Nyam-Erdene Odbayar, Munkhbayar Adiya, Hiroki Kishikawa, and Nobuo Goto, "Proposal of Integrated-Optical Circuit for Recogntion of 8PSK-Coded Label for Photonic Router," 13th Pacific Rim Conference on Lasers and Electro-Optics, Hong Kong, W4J.7, 29 July - 03 August, 2018.
  - Munkhbayar Adiya, Nyam-Erdene Odbayar, Hiroki Kishikawa, and Nobuo Goto, "Optical Waveguide-Type Circuit for Recognition of Two-Symbol 8PSK-Coded Labels from Maximum-Output" 23th MicroOptics Conference (MOC) 2018, Taipei, Taiwan, J-3, 15-18, October, 2018.
  - Ariunaa.Ts, Nyamsuren.P, Batdalai.S and Munkhbayar Adiya, "Introduction of FSO technology for Mongolian ICT network" In *Proceedings of conference on*

MUSTAK,pp. 206-210, 2011.

- Lkhagvasuren.T and Munkhbayar.A, “Algorithm of calculation timing delay for intelligent service”, In *Proceedings of conference on Khurel togoot, pp.*42-46, 2011.
- Ariunaa.Ts, Tserenlkham.B and Munkhbayar.A, *“FSO технология”,* In *Proceedings of conference on Khurel togoot, pp.*144, 2011.

- **Briefly list the most recent professional development activities (conference and seminar):**
  - None