# MUNKHNASAN CHOINZON

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CURRENT EMPLOYER: Graduate School of Engineering, Mongolian University of Science and Technology

**CURRENT POSITION**: Head of ICT Department

EDUCATION		
PhD in Computer Science Mongolian University of Science and Technology, Mongolia (credits collected at Ibaraki University of JAPAN, 2002-2005)	2010	
MSc in Computer Science Ibaraki University of JAPAN	2002	
Intensive Japanese Language Course Tsukuba University of JAPAN	1999	
MSc in Information and Computer Sciences Mongolian University of Science and Technology, Mongolia	1998	
BSc in Computer Science	1996	

# PROFESSIONAL EXPERIENCE

Head of	2022, Jan. to present
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Department of ICT

Graduate School of Engineering

Mongolian University of Science and Technology

Mongolian University of Science and Technology, Mongolia

# Associate professor

Department of Information Technology

School of Information Technology and Telecommunications, 2015 to 2021

Mongolian University of Science and Technology

# **Assistant professor**

Department of Information Technology

School of Information Technology and Telecommunications, 2010 to 2015

Mongolian University of Science and Technology

# **Senior Lecturer**

Department of Information Technology

School of Information Technology and Telecommunications, 2005 to 2009

Mongolian University of Science and Technology

# Research Fellow

Software engineering lab, Computer and Information

Sciences Department, Engineering Faculty of

Ibaraki University of JAPAN 1999 to 2000

# Lecturer

Department of Information Technology

School of Information Technology and Telecommunications,

Mongolian University of Science and Technology 1996 to 1999

#### RESEARCH FIELD

- Software engineering: Object-Oriented Design Quality
- AI and Machine Learning, Data analytics (Research interest)

# LANGUAGE

• Mongolian native

English speak well and read/write with high proficiencyJapanese speak fluently and read/write with good proficiency

Russian can read and understand

#### **INTERN WORK**

Pan Localization – II Mongolian Speech Recognition System, Information Technology group of MUST, International Project, IDRC

Team Member/Mongolian Representative, 2007 – 2009

#### MEMBERSHIPS OF PROFESSIONAL SOCIETIES

- Editorial Board Member of MUST Research proceedings, from 2018 to present
- Member of National Question Developing Committee for Information Technology Engineer Exam (ITPEC), from 2007 to present
- IEEE, Computer society member, from 2021 to 2023
- National Board Member of Doctoral Dissertation for Information, Communication and Electronics at the Ministry of Education, Culture, Science and Sports, from 2014-2021
- Editorial Board Member of Proceedings in Institute of Physics and Technology, Mongolian Academy of Science, from 2014-2020
- Editorial Board Member of SICT, MUST, from 2014 to 2016

# TRAININGS FOR PROFESSIONAL DEVELOPMENT

- "AI and Machine Learning", "Data analytics" online course, Lovely University, INDIA, from August 31 to September 30, 2022.
- "Software Development Processes and Methodologies", "Business Analysis & Process Management", "IT Project Management", "Cloud Computing Basics", online course, Coursera, September to October, 2020.
- "Global Software Engineering" joint seminar, Computer Science Faculty, Georg Simon Ohm University of Applied Sciences, Nuremberg, GERMANY, Mar.5-12, 2012.
- Regional Training on Localization of Mobile Platform, Lahore, PAKISTAN, Jan.29 Feb.5, 2012.
- The Training Program on Instructors for Software Design & Development Engineer Examination in Asian Countries, TKC, JAPAN, Nov.2 Nov.23, 2008.
- ADD-3 The School of Asian Applied Natural Language Processing for Linguistics Diversity and Language Resource Development, THAILAND, Feb.26 Mar.5, 2008.
- Research student in the Laboratory of Software engineering at Ibaraki University, JAPAN, from Oct,1999 to March, 2000.
- Intensive Japanese Language Course at the International Student Center of University of Tsukuba, JAPAN, from April, 1999 to Sept, 1999.

# PUBLICATIONS AND PAPERS

#### **Thesis**

Munkhnasan Choinzon, Metrics\_Based Quality Evaluation Model for Object Oriented Design, Ph.D thesis, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia, March 2010. Advisor: Dr. Ueda Yoshikazu (Associate Professor at Ibaraki University of JAPAN).

Munkhnasan Choinzon, Study of Coupling and Cohesion on Object Oriented Design, Master's thesis, Ibaraki University, Hitachi, JAPAN, March 2002. Advisor: Prof. Toshiro Araki.

Munkhnasan Choinzon, English-Mongolian Translator System, Bachelor's thesis, Mongolian University of Science and Technology, December 1995. Advisor: Prof. Uuganchuluun U.

# **Conference Papers/Conference Proceedings**

- Ц. Болдсүх, Ч. Мөнхнасан, "Программ хангамжийн төслийн төлөвлөгөөний боловсруулалт", МХТС-ийн эмхэтгэл, 2021.
- Б. Түмэнбаяр, Ч. Мөнхнасан, "Санхүү төлөвлөлтийн систем хөгжүүлэлт", МХТС-ийн эмхэтгэл, 2019.
- Ч. Мөнхнасан, "Сайн программ хангамжийн инженерчлэлийн судалгааны өгүүлэл бичих", ШУА, Физик, Технологийн Хүрээлэн, Бүтээл, №44, х.63-71, 2017.
- B.Damdinsuren, B. Sukhbat, Ts. Khurelbaatar, A. Altangerel, Ch. Munkhnasan, Z. Buyankhishig, Ch. Narantungalag, "Some Results of Mongolian Speech Processing", oCOCOSDA-2016, Bali, INDONESIA, 2016.
- Ч. Мөнхнасан, Д. Сарангэрэл, "Судалгааны илтгэл бичилтийн үндэс", ШУА, Информатикийн хүрээлэнгийн Эрдэм шинжилгээний эмхэтгэл, №42, х.106-112, 2016.
- Д. Сарангэрэл, Ч. Мөнхнасан, "Эрүүл Мэндийн Мэдээллийн Стандарт НL7", ММТ2016.
- Д. Сарангэрэл, Ч. Мөнхнасан, "Өгөгдөл олборлох технологи дээр тулгуурласан банкны харилцагчдын зээлжих чадамжийн судалгаа", ШУТИС-ийн профессор багш нарын эрдэм шинжилгээний бүтээлийн эмхэтгэл, №4/187, х.98-104, 2016.
- Б. Энхтөр, Ч. Мөнхнасан, "Зээлжих чадамжийн судалгаа", МХТС-ийн эмхэтгэл, 2016.
- Ч. Мөнхнасан, "2014 оны топ 10 стратегийн технологийн чиг хандлага", ШУА, Информатикийн хүрээлэнгийн Эрдэм шинжилгээний эмхэтгэл, №41, х.208-215, 2015.
- Ч. Мөнхнасан, "Объект хандалтат зохиомжийн чанар шалгах хэмжээс дээр тулгуурласан загвар", Эрдэм шинжилгээний бүтээлийн эмхэтгэл (Монголын оюунлаг эрдэмтэн эмэгтэйчүүдийн II чуулган), х.359-360, Улаанбаатар, 2014.

Munkhnasan. Ch, "Mobile Platforms Overview and Perspectives in the Context of Localization", Эрдэм Шинжилгээний Бүтээлийн Эмхэтгэл, №6/129, МУШУТИС, 2012.

Simon Beier, Matthias Bickel, Patricia Shiroma Brockmann, Munkhnasan Choinzon, "It takes Global Village to Teach Global Software Engineering: A Mongolian-German Team-Teaching Project", ICEEE2012, POLAND, 2012.

Simon Beier, Matthias Bickel, Patricia Shiroma Brockmann, Munkhnasan Choinzon, "It takes Global Village to Teach Global Software Engineering: A Mongolian-German Team-Teaching Project", ICEEE, IEEE, pp.152-157, 2012.

B.Damdinsuren, Ch. Munkhnasan, A. Altangerel, "Country report", oCOCOSDA-2011, Hsinchu, TAIWAN, 2011.

Ch. Munkhnasan, Yoshikazu Ueda, "Coupling and Cohesion on Gamma's Design Patterns", ICKI-2011, Ulaanbaatar, MONGOLIA (July 06-07, 2011).

- Ч. Мөнхнасан, "Объект хандалтат зохиомжийн чанар шалгах хэмжээс дээр тулгуурласан загвар", Хүрэлтогоот2010, Улаанбаатар, 2010.
- Ch. Munkhnasan, Yoshikazu Ueda and Toshiro Araki, "Metrics-Based Quality Evaluation Model for OO Design", The Proceedings of International Conference on Information and Communication Technology(ICICT2009), Ulaanbaatar, MONGOLIA (August 12-14, 2009).

Altangerel, B.Damdinsuren, Ch.Munkhnasan, "A large Vocabulary Speech Recognition System for Mongolian Language", COCOSDA-2008, Kyoto, JAPAN, 2008.

Munkhnasan Choinzon, Yasuo Taki, Yoshikazu Ueda(Ibaraki University, Japan), "Quality Metrics for Object-Oriented Design Assessment", The International Conference on Communication and Information Technology-2007, Ulaanbaatar, MONGOLIA (October 08-09, 2007).

Munkhnasan Choinzon, Yoshikazu Ueda , "Detecting Defects in Object Oriented Designs Using Design Metrics", Joint Conference On Knowledge-Based Software Engineering 2006 (JCKBSE'06), Tallinn, ESTONIA (2006/08/28-31).

Munkhnasan Choinzon, Yoshikazu Ueda, "Detecting Defects in Object Oriented Designs Using Design Metrics", Vol.140: Knowledge-Based Software Engineering, iOS Press, pp.61-72, 2006.

Munkhnasan Choinzon, Yoshikazu Ueda, "Detecting Defects in Object Oriented Designs Using Design Metrics", International Symposium on Information and Communication Technology by Mongolian University of Science and Technology, Moscow Technical University of Communication and Informatics, and Hanbat National University of Korea (July, 2005).

Munkhnasan Choinzon, Yoshikazu Ueda, "Detection of Design Problems in Object Oriented Development", Information Processing Society of JAPAN, SIG-SE, Vol.2005, No.1, pp.217-218 (March, 2005).

Munkhnasan Choinzon, Yasuo Taki, Yoshikazu Ueda, "Quality Metrics for Object-Oriented Design Assessment", The Institute of Electronics, Information and Communication Engineers (IEICE), JAPAN, (KBSE), Vol.104, No.725, pp.19-24 (March, 2005).

- B. Damdinsuren, O. Bat-Enkh, Ch. Munkhnasan, D. Erdenebat, "Role of speech Synthesis in Telecommunication and Information System", Asia-Pacific Symposium on Information and Telecommunication Technology(APSITT'99), Ulaanbaatar, MONGOLIA, August 30-31, 1999.
- B. Damdinsuren, Ch. Munkhnasan, O. Bat-Enkh, ``To the Questions of Mongolian Speech Synthesis Method Design", Policy of Mongolian Science and Technology-Sustainable Development in 21st: Century-Scientific Conference, Ulaanbaatar, MONGOLIA, May 7-8, 1998.
- B. Damdinsuren, Ch. Munkhnasan, O. Bat-enkh, D. Erdenebat, D. Khishigbayar, N. Erdenekhuu, "Some Results of Statistical Research of Mongolian Speech and it's Components", Policy of Mongolian Science and Technology-Sustainable Development in 21st:Century-Scientific Conference, Ulaanbaatar, MONGOLIA, May 7-8, 1998.

# **Technical Reports**

B.Damdinsuren, A.Altangerel, Ch.Munkhnasan, "Mongolian Speech Recognition System", Technical Report (PanL10Net, IDRC), PAKISTAN (Oct, 2010).

Miho Sato, Munkhnasan Choinzon, Yoshikazu Ueda, "A Study of Structural Defects Detection Model for Object-Oriented Design", Information Processing Society of JAPAN (IPSJ), Technical report (SIG-SE), Vol.2009, No.31, pp.185-192 (March, 2009).

A.Altangerel, Ch.Munkhnasan, "Large Vocabulary ASR for Mongolian", <a href="http://www.panl10n.net/mongolia/">http://www.panl10n.net/mongolia/</a>, 2009.

A.Altangerel, Ch.Munkhnasan, "Mongolian Speech Corpus", http://www.panl10n.net/mongolia/, 2009.

B.Damdinsuren, A.Altangerel, Ch.Munkhnasan, "Report on Comparative Evaluation of Two Toolkits for Mongolian Speech", PAN Localization project, <a href="http://www.panl10n.net/mongolia/">http://www.panl10n.net/mongolia/</a>, 2008.

Ч.Мөнхнасан, "Automatic Speech Recognition: Outcome mapping", http://www.panl10n.net/mongolia/, 2007.

Munkhnasan Choinzon, Yasuo Taki, Yoshikazu Ueda, "Quality Metrics for Object-Oriented Design Assessment", The Institute of Electronics, Information and Communication Engineers (IEICE), JAPAN, Technical report (KBSE), Vol.104, No.725, pp.19-24 (March, 2005).

#### **BOOK**

Ч.Мөнхнасан, Программ хангамжийн инженерчлэлийн үндэс, ISBN: 978-9919-25-787-3, 1<sup>st</sup> Edition, NUM Press, 2021.

# **EDITED BOOK**

Worked as Editor: IT Passport Exam Preparation Book (Мэдээллийн технологийн паспорт шалгалтад бэлтгэх гарын авлага), ISBN: 978-9919-24-200-8, 2021.

# **COOPERATIVE WORKS**

Developed National Standard on Assessment of Fundamental Knowledge of IT: MNS 6606:2016, 2016 (Мэдээллийн технологийн суурь мэдлэгийн шалгуур: MNS 6606:2016)

Worked as national accreditation expert: at Mandakh university in 2019, and at Global удирдагч university in 2023.