



Ariunzaya Gantulga

Nationality: Mongolian **Date of birth:** 20/12/1997 **Gender:** Female

Phone number: (+82) 01074250308

Email address: ariunzayagantulga2770@gmail.com

LinkedIn: <https://www.linkedin.com/in/ariunzayag/>

Google Scholar: <https://scholar.google.com/citations?user=HNDyOcgAAAAJ&hl=en>

Website: <https://ariunzayag.github.io/>

Home: 51140 Changwon (South Korea)

ABOUT ME

I am currently a graduate student at Changwon National University's Department of Computer Engineering. My research involves biological data classification utilizing machine learning and deep learning.

Area of interest:

Machine learning and deep learning

WORK EXPERIENCE

Research student

Changwon National University [02/03/2021 – Current]

City: Changwon

Country: South Korea

As a full-time research student, I studied biological data identification and classification analysis. I was thus recognized and categorised through the use of scanning electron microscopy (SEM) images in collaboration with the Departments of Biology & Microbiology and Computer Engineering. The task was completed by gathering information from various publications and then preprocessing the images. In addition, I did two main tasks. These include the categorization of seed coat pattern images and the creation of new groups based on seed coat pattern images. First, I defined the seed coat pattern and classified it using the popular deep learning network. Second, fresh grouping was conducted using unsupervised machine learning on the preprocessed images.

Front-End Developer

DDISH LLC [01/08/2020 – 17/02/2021]

City: Ulaanbaatar

Country: Mongolia

I worked as a front-end developer at DDISH LLC, a subsidiary of MCS Group, a large Mongolian group. During this time, our company upgraded its previously used call center system. The following are included: JavaScript (ReactJS), HTML, CSS, and Material UI.

Software engineer

DDISH LLC [17/06/2019 – 01/08/2019]

City: Ulaanbaatar

Country: Mongolia

When I first started as a software developer at the company, the KPI of call center system operators was handled manually. Therefore, work was done to design a KPI automation module for the call center system. PHP Symfony

Framework, advanced database technologies were used. I was challenged by the unknown and new technologies while working at the organization.

Intern

Machine Intelligence Laboratory [01/06/2018 – 01/07/2018]

City: Ulaanbaatar

Country: Mongolia

My internship taught me basic concepts of natural language processing (NLP) and found between word similarity and distance-based cosine similarity using Java.

EDUCATION AND TRAINING

Bachelor of Engineering

National University of Mongolia [01/09/2015 – 21/06/2019]

Address: Sukhbaatar District, Ikh Surguuliin Street - 1, Baga Toiruu, Ulaanbaatar, 14200 Ulaanbaatar (Mongolia)

Website: <https://www.num.edu.mn/>

Field(s) of study: Information and Communication Technologies: *Software and applications development and analysis*

Final grade: 3.1/4.0 – Level in EQF: EQF level 6

Thesis: Mongolian WordNet

Throughout my engineering bachelor's program, I studied a variety of technical programming languages and gained knowledge of the fundamentals of engineering.

Master of Engineering

Changwon National University [02/03/2021 – Current]

Address: 20 Changwon Daehak-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, 51140 Changwon (South Korea)

Website: <https://www.changwon.ac.kr/>

Field(s) of study: Information and Communication Technologies: *Software and applications development and analysis*

Final grade: 3.8/4.5 – Level in EQF: EQF level 7

Thesis: Identification and Classification of Seed Coat Sculptures using Deep Learning

Link: <https://drive.google.com/file/d/1jt5Xe-HQvuWGF58wXYWB1IVL9NtFY3JH/view?usp=sharing>

In my master of engineering degree, I proposed my own research methodologies and had a thorough understanding of computer science concepts.

CONFERENCES AND SEMINARS

Color-Blind Image Correction

[Ulaanbaatar, Mongolia, 14/08/2017 – 18/08/2017]

Link: <https://drive.google.com/file/d/1Ph9ljgevUVqVO-BXZCWks4uRNY4hodSK/view?usp=sharing>

PUBLICATIONS

A multi-considered seed coat pattern classification of Allium L. using unsupervised machine learning

[2022]

Ariunzaya Gantulga et al., Plants 2022, 11(22), 3097

Link: <https://doi.org/10.3390/plants11223097>

Identification of Seed Coat Sculptures using Deep Learning

[2022]

Ariunzaya Gantulga, Jonathan CL Kavalan, and Sungwook Chung, Journal of Asia-Pacific Biodiversity

Link: <https://doi.org/10.1016/j.japb.2022.11.006>

VOLUNTEERING

President of Winter National Conference (AIESEC in Mongolia)

[Ulaanbaatar, Mongolia, 01/10/2017 – 01/10/2018]

I worked as a conference president to improve the activity and knowledge of the members. Our team consists of members in marketing, finance, external relations, delegate experience, and logistics.

Vice President Logistic of Summer National Conference (AIESEC in Mongolia)

[Ulaanbaatar, Mongolia, 05/05/2017 – 25/08/2017]

Collected and provided the materials needed for training and delegates. Manage the conference logistics in terms of venue, transportation, materials. Allocate and track all the conference materials for its sufficiency.

Member of Incoming Global Volunteer (AIESEC in Mongolia)

[Ulaanbaatar, Mongolia, 10/03/2017 – 26/08/2017]

I learned how to interact with international people and connect with my team.