# Seonuk Kim

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# **EDUCATION**

2020 -  $\,$  Ulsan National Institute of Sci-  $\,$  Present  $\,$  ence and Technology (UNIST)

B.Sc. Candidate in *Industrial Engineering* and *Design* 

## **PUBLICATION**

[C1] Seonuk Kim, and Kyungho Lee. "A Study on the Use of AI as Creative Support Tool for Line Drawing in Manga Production." KSDS Spring Conference Proceeding, 2022. Student Paper Honorable Mention Award

# **HONORS & AWARDS**

- 2022 **Honorable Mention, Spring DSUS** *Korea Society of Design Studies (KSDS)*
- 2022 Excellence Prize, IEEE Quiz Contest *IEEE*, *KITIS*
- 2021 Silver Prize, Data Science Competition Korea National Oil Corporation (KNOC) UNIST, POSTECH, KAIST, etc.
- 2021 Gold Prize, Undergrad Essay Contest Consulate-General of Japan in Busan
- 2020 Special Prize, Uni-CODE UNIST Algorithm Programming Contest
- 2020 Excellence Prize, Patent Universiade Korean Intellectual Property Office (KIPO) Samsung Electronics

## **SKILLS**

Data Science NumPy, Pandas, Matplotlib,

Seaborn (Main Lang.: Python)

AI/ML Tensorflow, Keras, PyTorch,

Pycaret, Prophett

Design Clip Stuido, Photoshop,

Illustrator, InDesign, SolidWorks, Ansys

#### REFERENCES

References available upon request.

#### **SUMMARY**

Hope to automate repetitive tasks that occur in the working process on manga and webtoon production using CNN or GAN. Know how to use a graphic tablet, and be interested in UX/UI and improvement of creative support tools for comic. My Goal is applying various backgrounds such as web design, 3D modeling, and cel shading to comic creation.

# RESEARCH EXPERIENCE

DEC 2021 - PRESENT

# **Expressive Computing Lab, UNIST**

Research Intern (Advisor: Professor Kyungho Lee)

**Study on AI-based Manga Production Support Tool Improvement.** Built pipeline with SOTA models to take analog or digital rough sketches as input, pencil-style line drawing and automatic shading as output. **In Industry-academia Joint Research with LG H&H**, configurated image style transfer pipeline, created conda environment and handed over set-up manual.

Nov 2020 - Dec 2021

#### Service Eng. & Knowledge Discovery Lab, UNIST

AI Grad School Creative Autonomous Research Program

**Development of Behavioral Data-based AI Model for Cat Arthritis Predictive.** Research proposal was selected after school screening. Designed control experiment and fabricated measurement device. Preprocessed sensor-based cat behavioral weekly timeseries data such as position, acceleration, and angular velocity.

#### **TEACHING**

#### Ulju The Dream Campus Mentoring Program

Head Mentor, HeXA May - Dec 2021

Basic Python and Algorithm Programming program

Head Mentor, UNITS Sep - Dec 2021

Let's Build Robot Arm using Arduino and 3D Printer program

#### **EXTRACURRICULAR**

**HeXA**, UNIST Programming and Security Society

President (Aug 2022 - Present)

Sep 2020 - Present

**brAIns**, UNIST Artificial Intelligence Society

Excutive Member (Mar 2022 - Present)

Jan 2021 - Present

Last Updated: August 1, 2022