

# Seungwoo Ko

+82-10-4703-0152 | [s2ko@uwaterloo.ca](mailto:s2ko@uwaterloo.ca) | [linkedin.com/in/seungwoo-ko-512030225/](https://www.linkedin.com/in/seungwoo-ko-512030225/) | [github.com/kosnoa](https://github.com/kosnoa)

## EDUCATION

---

### University of Waterloo

*Bachelor of Arts in Mathematics*

Waterloo, ON

*Sep. 2022 – Present*

## MILITARY SERVICE

---

### Republic of Korea Army (ROKA)

*Active Duty, Full Military Service*

South Korea

*Sep. 2023 – Mar. 2025*

## EXPERIENCE

---

### Assistant Teacher

*Grace English Academy*

Jul. 2019 – Aug. 2019

*Hwaseong, Gyeonggi, South Korea*

- Supported instruction for students ranging from preschool to middle school, adapting to various learning needs and classroom settings.
- Collaborated with lead teachers on lesson planning, classroom management, and instructional delivery.
- Led interactive learning activities and provided individualized academic support to enhance student engagement and comprehension.
- Contributed to a positive and well-organized classroom environment that promoted effective learning.

### Private Math Tutor

*Self-Employed*

Jan. 2022 – July. 2022

*Seoul, South Korea*

- Provided one-on-one math tutoring twice a week for 2 hours, focusing on 7th-grade curriculum.
- Developed personalized lesson plans and exercises to strengthen student's understanding and confidence in core math concepts.
- Monitored progress regularly and adjusted teaching strategies to meet individual learning needs.

### English-Korean Translator

*International Volunteer Organization (IVO)*

July 2022 – Aug. 2022

*Yongin, Gyeonggi, South Korea*

- Translated educational materials from English to Korean, ensuring clarity and cultural accuracy for student audiences.
- Translated a formal Korean job posting into English, maintaining professional tone and context for international applicants.

## PROJECTS

---

### Isaac Item Detection App | *Python, OpenCV, PyAutoGUI, NumPy*

Mar. 2025 – Present

- Built an image recognition tool to detect pedestal items in The Binding of Isaac gameplay screenshots
- Applied template matching and filtering techniques to identify and remove duplicate detections
- Designed modular code to support integration of item lookup and description rendering

## TECHNICAL SKILLS

---

**Languages:** C/C++, JavaScript, HTML/CSS, Python, Bash

**Frameworks:** JQuery, BootStrap

**Developer Tools:** VS Code, Visual Studio, Vim, Ubuntu, Git

**Libraries:** NumPy, OpenCV, PyAutoGUI