# Bocheon Gim

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College of Information and Computing
Gwangju Institute of Science and Technology
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## EDUCATION

**M.S.** In **Intelligent Robotics** — **Mar 2024 - Present**
Gwangju Institute of Science and Technology (GIST) — Gwangju, Korea
Advisor: Prof. SeungJun Kim

**B.S.** in **Electrical Engineering and Computer Science** — **Mar 2018 - Feb 2024**
Gwangju Institute of Science and Technology (GIST) — Gwangju, Korea
Advisor: Prof. Jeany Son & Prof. SeungJun Kim

## EXPERIENCE

**Research Assistant**
Human-Centered Intelligent Systems Lab. (led by Prof. SeungJun Kim) — **Mar 2024 - Present**
Gwangju Institute of Science and Technology (GIST) — Gwangju, Korea

**Research Intern**
Human-Centered Intelligent Systems Lab. (led by Prof. SeungJun Kim) — **Jul 2022 - Feb 2024**
Gwangju Institute of Science and Technology (GIST) — Gwangju, Korea

**English Translator & Training Systems Administrator**
Republic of Korea Airforce (ROKAF) — **Jun 2020 - Feb 2022**
Completed Obligation at Staff Sgt. — Gwangju, Korea

**HAFS Camp Senior Teacher (Winter)**
Hankuk Academy of Foreign Studies — **Dec 2019 - Feb 2020**
Main Teacher of West-Point Class — Gwangju, Korea

## RESEARCH INTERESTS

- Human Computer Interaction
- VR / AR / XR
- Multisensory Integration & Manipulation
- Automotive Interfaces

## PUBLICATIONS

***International***

**[I6] SelfBlending: Artificial Intelligence-driven Augmentation with Hand Interactions for Seamless Reality Blending in Virtual Environments**

Ahmed Elsharkawy, **Bocheon Gim**, Aya Ataya, SeungJun Kim

IEEE TVCG – Under Review

**[I5] AttraCar: Multisensory In-Car VR with Thermal, Airflow, and Motion Feedback through Built-In Vehicle Systems**

Dohyeon Yeo, Gwangbin Kim, Minwoo Oh, Jeongju Park, **Bocheon Gim**, Seongjun Kang, Ahmed Elsharkawy, SeungJun Kim

UIST 2025 – *Conditionally Accepted*

**[I4] EarPressure VR: Ear Canal Pressure Feedback for Enhancing Environmental Presence in Virtual Reality**

Seongjun Kang, Gwangbin Kim, **Bocheon Gim**, Jeongju Park, Semoo Shin, SeungJun Kim
UIST 2025 – *Conditionally Accepted*

**[I3] TeleHopper: Simulating a Jumping Sensation as Proprioceptive Feedback for Teleportation in Virtual Reality via Electrical Muscle Stimulation**
Juwon Um, **Bocheon Gim**, Seongjun Kang, Yumin Kang, Eunki Jeon, SeungJun Kim
ACM CHI 2025 Late-breaking Work

**[I2] I Want to Break Free: Enabling User-Applied Active Locomotion in In-Car VR through Contextual Cues**
**Bocheon Gim**, Seokhyun Hwang, Seongjun Kang, Gwangbin Kim, Dohyeon Yeo, and SeungJun Kim
ACM CHI 2025

**[I1] Curving the Virtual Route: Applying Redirected Steering Gains for Active Locomotion in In-Car VR**
**Bocheon Gim**, Seongjun Kang, Gwangbin Kim, Dohyeon Yeo, Seokhyun Hwang, and SeungJun Kim
ACM CHI 2024 Late-breaking Work

***Domestic***

**[D2] TherMusic: A Valence-Arousal-Based Music Emotion Classifier and Thermal Feedback Headset System**

Seongjun Kang, **Bocheon Gim**, Juwon Um, SeungJun Kim
KIISE Korea Computer Congress 2025 (Best Paper Award 🏆 )

**[D1] Utilizing Real-Time Video Matting to create a Scalable System for Real Hand Visualization and Interaction within Augmented Virtuality**

**Bocheon Gim**, Seongjun Kang, Juwon Um, SeungJun Kim
KIISE Korea Computer Congress 2025

## FUNDED PROJECTS

- **HCI + AI for Human-Centered Physical System Design (AI for HCI)**, GIST-MIT Research Collaboration Grant, GIST Research Project (2024-2025)
- **SpaceTop: Spatial Computing HCI Technology for Everywhere XR Productivity Workstations**, University ICT Research Center (ITRC) Program, IITP/MSIT (2024-2031)
- **Inter-University Alliance for Cultivating R&D Experts in Future Vehicular Technologies (I4FT)**, The Competency Development Program for Industry Specialist, KIAT/MOTIE (2022-2026)
- **Development of Natural User Interface (NUI) to Support Realistic Movement and Interaction within Metaverse Industrial Sites**, KETI (2022)

## SKILLS

- Linguistic: Korean (Native), English (Native – iBT TOEFL (114/120))
- Programming Languages: Python, C, C#, C++, Java, Javascript, HTML/CSS, React Native, R
- Software & Tools: Unity, Unreal Engine, SPSS, MATLAB, JASP
- Hardware: Arduino, Raspberry Pi
- Visualization & Modeling : Blender, Final Cut Pro, Adobe Illustrator

## ACADEMIC SERVICES

- **Peer Review** (17 total, 3 Special Recognitions for Outstanding Reviews)
    - **Full Papers**: CHI PLAY 2025, DIS 2025, MobileHCI 2025, IMWUT 2025, AutoUI 2025, SUI 2025
    - **Posters**: CHI 2025 LBW, DIS 2025 WIP, IMX 2025 WIP, MobileHCI 2025 WIP
- **Student Volunteering** : CHI 2025
- **Invited Talks** : KCC Top Conference Session (Jeju, South Korea)