# Seongmin Hong

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I'm a Ph.D. candidate in ECE SNU, interested in the inversion of generative models and computational imaging.

#### Education

<b>Ph.D.</b> in Electrical and Computer Engineering – Seoul National University Advisor: Se Young Chun	03 2020 — 02 2026 (expected)
<b>B.S.</b> in Electrical and Computer Engineering – Seoul National University	03 2016 — 02 2020
Mathematics and Physics – Gyeonggi Science High School for the Gifted	03 2013 — 02 2016

## Publications (selected, first author)

#### On Exact Inversion of DPM-Solvers

Seongmin Hong, Kyeonghyun Lee, Suh Yoon Jeon, Hyewon Bae, Se Young Chun Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

## On the Robustness of Normalizing Flows for Inverse Problems in Imaging

Seongmin Hong, Inbum Park, Se Young Chun

International Conference on Computer Vision (ICCV), 2023.

## Neural Diffeomorphic Non-uniform B-spline Flows

Seongmin Hong, Se Young Chun

Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI), 2023.

Advanced direction of arrival estimation using step-learnt iterative soft-thresholding for frequency-modulated continuous wave multiple-input multiple-output radar

Seongmin Hong, Seong-Cheol Kim, Seongwook Lee

IET Radar, Sonar & Navigation, 2023.

#### Radar Signal Decomposition in Steering Vector Space for Multi-Target Classification

Seongmin Hong, Seongwook Lee, Byeong-Ho Lee, Jinwook Kim, Yong-Hwa Kim, Seong-Cheol Kim IEEE Sensors Journal, 2021.

#### **Invited Talks**

# On the Robustness of Normalizing Flows for Inverse Problems in Imaging (upcoming)

In 2024 SIAM Conference on Imaging Science Minisymposium: Recent Strides in Deep Inverse Problems: From PDEs/ODEs, Neural Implicit Representations, and Beyond.

#### Services

Technical Research Personnel<sup>1</sup> in SNU (Alternative military service)

03 2023 - 02 2025

Technical Research Personnel<sup>2</sup> in a designated company or research institute 03 2026 – 02 2027 (expected)

Journal reviewers: IEEE Sensors Journal

2023

<sup>&</sup>lt;sup>1</sup>The technical research personnel system is a form of alternative military service that enables companies (research institutes) designated by the commissioner of the Military Manpower Administration to utilize research personnel for the advancement of science and technology in Korea.

<sup>&</sup>lt;sup>2</sup>In my case, I am required to serve in the designated company (or research institute) for one year starting from March 2026 to fulfill my military service obligations.