Dawit Mureja Argaw

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EDUCATION

- **KAIST** Daejeon, South Korea
  Integrated M.S./Ph.D. in Electrical Engineering; supervised by Prof. In So Kweon *Sep 2019 - Present*

- **KAIST** Daejeon, South Korea
  M.S. in Electrical Engineering; supervised by Prof. In So Kweon *Sep 2018 - Aug 2019*

- **KAIST** Daejeon, South Korea
  B.S. in Electrical Engineering; GPA: 3.9/4.3 (Magna Cum Laude) *Sep 2014 - Jul 2018*

RESEARCH INTERESTS

My research interests lie in the general areas of computer vision and deep learning with a particular focus on image/video enhancement, motion estimation, video synthesis and compression.

PUBLICATIONS

International Conferences

- **Dawit Mureja Argaw**, Junsik Kim, Francois Rameau, In So Kweon. Motion-blurred Video Interpolation and Extrapolation. In *Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI)*, 2021.

- **Dawit Mureja Argaw**, Junsik Kim, Francois Rameau, Jae Won Cho, In So Kweon. Optical Flow Estimation from a Single Motion-blurred Image. In *Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI)*, 2021.

- Chaoning Zhang*, Philipp Benz*, **Dawit Mureja Argaw**, Seokju Lee, Junsik Kim, Francois Rameau, Jean Charles Bazin, In So Kweon. ResNet or DenseNet: Introducing Shortcuts to ResNet. In *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2021.

- Chaoning Zhang, Francois Rameau, Junsik Kim, **Dawit Mureja Argaw**, Jean Charles Bazin, In So Kweon. DeePTZ: Deep Self-Calibration for PTZ cameras. In *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2020.

- Chaoning Zhang, Francois Rameau, Seokju Lee, Junsik Kim, Philipp Benz, **Dawit Mureja Argaw**, Jean Charles Bazin, In So Kweon. Revisiting Residual Networks with Nonlinear Shortcuts. In *British Machine Vision Conference (BMVC)*, 2019. (**spotlight**)

International Journals

- **Dawit Mureja Argaw***, Malinda Vania*, Deukhee Lee. Automatic spine segmentation from CT images using convolutional neural network via redundant generation of class labels. In *Journal of Computational Design and Engineering (JCDE)*, 2019.

EXPERIENCE

- **KAIST Robotics and Computer Vision Lab** Daejeon, South Korea
  Research Assistant *Sep 2018 - Present*
  - Research on various computer vision tasks such as Image/Video deblurring, Optical flow estimation and Video frame interpolation.

- **KAIST Artificial Intelligence and Machine Learning Lab** Daejeon, South Korea
  Undergraduate Research Participation *Jan 2017 - Dec 2017*
  - Researched on new mechanisms to enhance the performance of Memory Augmented Neural Networks (MANN) for one-shot learning and Visual Question Answering (VQA) tasks. Won an Excellent Research Award (1500$).

- **KIST Medical Navigation Laboratory** Seoul, South Korea
  Research Internship *Jul 2017 - Sep 2017*
  - Researched on segmenting the spine from Computed Tomography (CT) images using CNNs. Published a journal paper as a first co-author on Journal of Computational Design and Engineering (JCDE).

Honors and Awards

- **Magna Cum Laude**, KAIST Electrical Engineering Department, Aug 2018.
- **Excellent Research Award**, KAIST Undergraduate Research Participation (URP), Sep 2017.
- **Dean's List**, KAIST School of Freshman, Feb 2015.
- **KAIST Alumni Foundation Scholarship**, 2015
- **KAIST Scholarship**, Full scholarship for B.S., M.S. and Integrated M.S./Ph.D. programs, 2014-2023

Skills

- **Prog. Lang.**: Python, Matlab, C, Java, LaTeX
- **Deep Learning**: Pytorch, Tensorflow, Keras.
- **Library**: Numpy, Scipy, Scikit-learn, OpenCV, Matplotlib.

References

- **Prof. In So Kweon**
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- **Prof. Chang D. Yoo**
  School of Electrical Engineering, KAIST
  Email: cd_yoo@kaist.ac.kr