Toshiba Kamruzzaman

k2432032@gl.cc.uec.ac.jp
+81-070-8996-4440
Chofu, Chogaoka,Tokyo

Education

April'24 – **Masters' Student** in Mechanical Intelligent System
University of Electro-communication, Tokyo,Japan
Research Topic: *Viatal sign detection of newborn babies using thermal images.*

Oct'23 – March'24 **Research Student** in Mechanical Intelligent System
University of Electro-communication, Tokyo,Japan
Research Topic: *Viatal sign detection of newborn babies using thermal images.*

Jan'16 – Sept'21 **B.Sc.** in Electrical and Computer Engineering
Rajshahi University of Engineering and technology, Rajshahi, Bangladesh
Thesis title: *Automatic Image Captioning Using Deep learning.*

Research Publications

Conference Proceedings

1. T. Kamruzzaman, S. Kamruzzaman, and A. Zaman, "A deep learning approach for bangla image captioning system," in *2021 Joint 10th International Conference on Informatics, Electronics Vision (ICIEV) and 2021 5th International Conference on Imaging, Vision Pattern Recognition (icIVPR)*, 2021, pp. 1–6. DOI: 10.1109/ICIEVicIVPR52578.2021.9564129.
2. M. R. Islam, A. Matin, and T. Kamruzzaman, "Automatic identification of driver inattentiveness using convolutional neural networks," in *2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE)*, 2020, pp. 21–24. DOI: 10.1109/WIECON-ECE52138.2020.9398040.
3. T. Kamruzzaman, "Arabic to bangla machine translation using encoder decoder approach," in *2020 IEEE Region 10 Symposium (TENSYMP)*, 2020, pp. 1176–1179. DOI: 10.1109/TENSYMP50017.2020.9230786.

Books and Chapters

1. T. Kamruzzaman, A. Matin, T. Seuti, and M. Islam, *Automatic Image Captioning Using Deep Learning*. May 2023, pp. 138–149, ISBN: 9781003256106. DOI: 10.1201/9781003256106-12.

Skills

Coding	Python3, C++
ML framework	OpenCV, Caffe, Tensorflow, Pytorch, MLFlow
Camera Interfaces	FLIR A315, Pure-thermal, Boston, Gigabit, USB
Web Dev	Html, css, JavaScript, Apache Web Server, Tomcat Web Server.
Misc.	GitHub, Confluence, Slack

Qualification

Digital image processing	Brightness/contrast enhancement, sharpening, ICC color profiles, resampling and anti-aliasing, image compression and file formats (e.g., JPEG, TIFF, PNG, HEIC, SVG), video compression and file formats (e.g., MP4, H.264, H.265),
Digital and analog Image science	Color and sharpness targets, generation of ICC profiles for devices such as color printers, image quality assessment metrics and techniques, color spaces.
AI in digital image	Face detection, facial feature finding, smile detection, head pose determination, image quality score, subject/background detection and replacement.

Awards and Achievements

2020 **Winner**, IEEE R10 Undergrad-Project Video Contest

2017 **Honorable Mention**, IEEE R10 HTC Idea Contest

Scholarship

2023 **MEXT Scholarship**, For Higher Education in Japan

2018 **University Technical Scholarship**, Full Tuition Fee waiver in Bachelor for one academic-year.

2016 **University Technical Scholarship**, Full Tuition Fee waiver in Bachelor for one academic-year.

2010 **Bangladesh Govt. Scholarship**, in Junior School Certificate (JSC) examination Full Tuition Fee waiver in High-School with stipend for the period of 2010 to 2013.