Nguyen Hong Hai

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Education

Chonnam National University

Gwanaju, South Korea, Mar 2021 - Feb 2023

M.S. in Artificial Intelligence Convergence

Overall GPA: 4.29/4.5

Thesis: Multi-space Fusion for Mental Workload Estimation based on Physiological Signal. Advisor: Prof. Kim Soo-Hyung

Ho Chi Minh City - University of Science (HCMUS)

Ho Chi Minh City, Vietnam, Sep 2014 - Sep 2018

B.S. in Mathematics and Computer Science

Overall GPA: 3.24/4.0

Thesis: Face recognition based on partial face.. Advisor: Prof. Pham The Bao

Experience

Innometry

Hwaseong, South Korea, Mar 2023 - Present

Artificial Intelligence Engineer

- Image enhancement: Convert x-ray image (32bit) from High Range Dynamic to Low Range Dynamic for display on the device (8bit).
- **Object detection:** Using Deep Learning method for detection of elements battery.

Chonnam National University

Gwangju, South Korea, Mar 2021 - Feb 2023

Master's Student

- $\bullet \ \ \textbf{Mental Workload Estimation:} \ \text{Experiment with } \textit{STEW} \ dataset. \ We \ conducted \ experiments \ on \ classification \ and \ regression \ for \ Mental \ workload.$
- **Stress Estimation:** Experiment with *Ulm-TSST* dataset, We conducted experiments on Valence-Arousal estimation in *Multimodal Emotional Stress Sub-challenge* in *Multimodal Sentiment Analysis Challenge (MuSe)*.
- Valence-Arousal Estimation: Experiment on the Aff-Wild2 dataset. We achieved 3rd place in Task 1 Valence-Arousal Estimation in Workshop and Competition on Affective Behavior Analysis in-the-wild.

Sparx* - A Virtuos Studio

Ho Chi Minh, VietNam, Oct 2018 - Jan 2021

Pipeline Engineering

- · R&D automation scripts and tools inside and outside a 3D application to help the artist can be quickly worked on.
- Installation and troubleshooting of software, plugins, and scripts.
- Supporting producers and team leaders in training for newbies.

Global Cybersoft Vietnam

Ho Chi Minh, VietNam, Jul 2017 - Sep 2017

Internship

Selected Publications.

Conferences

- 1. E.-B. Choi, **H.-H. Nguyen**, T. N. Nguyen, and S.-H. Kim, "Stress analysis based on feature-level late fusion", in Proc. Int. Conf. Smart Media and Applications (SMA2022), USA, Oct. 2022, pp. 110–114.
- 2. **H.-H. Nguyen**, V.-T. Huynh, and S.-H. Kim, "An ensemble approach for facial behavior analysis in-the-wild video", in Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshop, USA, 2022, pp. 2512–2517.
- 3. **H.-H. Nguyen**, H.-J. Yang, G.-S. Lee, and S.-H. Kim, "Cognitive load classification using multimodal transformer encoder fusion combined with gaussian noise", in Proc. Int. Workshop on Frontiers of Computer Vision, Japan, Feb. 2022, pp. 481–488.
- 4. **H.-H. Nguyen**, V.-T. Huynh, H.-J. Yang, G.-S. Lee, and S.-H. Kim, "MAFCL: Multimodal attention fusion with combined loss for sentiment recognition in stress-induced circumstances", in Proc. Int. Conf. Smart Media & Applications (SMA2021), Korea, Sep. 2021, pp. 16–19.

Skills

Programming Python, R, C/C++, MATLAB, LTEX.

Technical PyQt, TensorFlow, PyTorch, OpenCV.

Awards

Oct 2022	Best Paper, International Conference on Smart Media & Applications 2022 (SMA2022)	USA
Jun 2022	3rd place , Valence/ Arousal Estimation Challenge in Affective Behavior Analysis in-the-wild (CVPRW)	USA
Sep 2021	Best Paper, International Conference on Smart Media & Applications 2021 (SMA2021)	South Korea
Feb 2021	Scholarship, Global Scholarship - Chonnam Nat'l Univ.	South Korea

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