NGUYEN HONG HAI

Artificial Intelligence

honghaik14@gmail.com live:honghaik14 github.com/honghai-nguyen

CONTACT

- Name: Nguyen Hong Hai
- Date of birth: 14 January 1996
- Mobile : +82 10 4758 1996 (Kakao)
- Nationality: Vietnamese

EDUCATION

M.E. in Artificial Intelligence

Chonnam National University, South Korea.

03/2021 – present Gwangju, South Korea

- GPA: *4.29/4.5*.
- Thesis title: *Multi-space Fusion for Mental Workload Estimation based on Physiological Signal*.
- Supervisor: *Prof. Soo-Hyung Kim*.

B.S. in Mathematics and Computer Science

Vietnam National University, HoChiMinh City - University of Science (HCMUS).

09/2014 – 09/2018 Ho Chi Minh, VietNam

- GPA: *8.09/10*.
- Thesis title: *Face recognition based on partial face*.
- Supervisor: *Prof. Pham The Bao*.

RESEARCH INTERESTS

My research interests are computer vision, time series analysis, sentiment analysis, and cognitive load. Currently, I am working on mental workload estimation to apply it in brain-computer interfaces.

AWARD

- Best Paper Award in *International Conference on Smart Media & Applications 2022*.
- Third place in Affective Behavior Analysis in-the-wild (ABAW) Challenge - *CVPR Workshop 2022*. Team: *PRL*.
- Best Paper Award in *International Conference on Smart Media & Applications 2021*.

SKILLS

Programming Language: Python, R, C/C++, MATLAB, LaTeX.
Technical: PyQt, TensorFlow, PyTorch, OpenCV.

EXPERIENCE

Master's Student

Chonnam National University

03/2021 – Present Gwangju, South Korea

- **Mental Workload Estimation**
  Experiment with *STEW* dataset. We conducted experiments on classification and regression for Mental workload.
- **Stress Estimation**
  Experiment with *Ulm-TSST* dataset, our work 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*. Project page.

Pipeline Engineering

Sparx* - A Virtuos Studio

10/2018 – 01/2021 Ho Chi Minh, VietNam

- Research and development of tools based on potential software.
- 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.

Intership

Global Cybersoft Vietnam

07/2017 – 09/2017 Ho Chi Minh, VietNam

- **Motorcycle detection:** Research histograms of oriented gradients (HOG), local binary patterns (LBP) features and support vector machines (SVM) for detection.

PUBLICATIONS

Conference Proceedings

- E.-B. Choi, **Nguyen, Hong-Hai**, T. N. Nguyen, and S.-H. Kim, "Stress analysis based on feature-level late fusion," in *Proc. Int. Conf. Smart Media and Applications (SMA2022), Oct. 2022.*, 2022, pp. 110–114.
- **Nguyen, Hong-Hai**, 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*, 2022, pp. 2512–2517.
- **Nguyen, Hong-Hai**, 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 and Applications (SMA2021), Sep. 2021.*, 2021, pp. 16–19.