GIANG PHAM PhD Student

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EDUCATION

Department of Computer Science, University of Pisa — Pisa, Italy
Ph.D. in Computer Science — 2022 - present
- Advisor: Prof. Paolo Milazzo
- Research area: Computational biology

Department of Computer Science, University of Pisa — Pisa, Italy
MSc in Computer Science — 2019 - 2022
- Final grade: 110/110 cum laude

Vietnam National University — Hanoi, Vietnam
BSc in Computer Science — 2015 - 2019
- Final grade: 3.09/4.0

PUBLICATIONS

1. **Giang Pham**, Paolo Milazzo. Gene importance assessment based on shapley value for boolean networks: Validation and scalability analysis, in: Proc. of 12th Int. Symposium "From Data to Models and back (DataMod 2024)", Lecture Notes in Computer Science, Springer, in press.

2. **Giang Pham**, Paolo Milazzo. Preliminary results on Shapley value notions and propagation methods for boolean networks, in: Proc. of 11th Int. Symposium "From Data to Models and back (DataMod 2023)", Lecture Notes in Computer Science, Springer, in press.

PROJECTS

MEDICA: Modelling and vErification of alkaptonuria and multiple sclerosis Driven by biomedICAl data, 2022RNTYWZ
University of Pisa — 2023 - present

PAN-HUB: Hub multidisciplinare e interregionale di ricerca e sperimentazione clinica per il contrasto alle pandemie ed all'antibiotico resistenza, CUP: I53C22001300001
University of Pisa — 2023 - present

ProMI: A computational workflow for assessing the impact of amino acid mutations on protein-ligand affinity using AlphaFold2 and MD simulation
University of Pisa — 2022.01 - 2022.10

PRESENTATIONS AND CONFERENCES

Towards a Shapley value propagation method for Boolean networks
The 22nd International Conference on Computational Methods in Systems Biology, Pisa, Italy — 2024.09

Towards a Shapley value propagation method for Boolean networks
The 11th International Symposium DATAMOD 2023 From Data to Models and back, Eindhoven, Netherlands — 2023.11

Computational estimation of the impact of amino acid mutations on protein-ligand affinity based on Alphafold and MD simulation
The 18th Conference on Computational Intelligence Methods for Bioinformatics & Biostatistics, Padova, Italy — 2023.09

CONFERENCE ORGANIZATION

Organizing committee: *The 22nd International Conference on Computational Methods in Systems Biology* — 2024.09

EXPERIENCES   **Viettel Research and Development Institute**
                  Computer Vision Engineer | Hanoi, Vietnam   2015.09 - 2019.09

- Indoor surveillance system (2018.03 - 2019.09)

    – Finetuned and customized SSD model for human detection.
    – Developed face classification module using Haar Cascade to detect faces, VGG model to extract features and SVM to classify face features in Python and used Cython to provide C++ interface for this module.
    – Tracked multiple objects by associating detected objects with tracked objects by using Kalman to predict and the Hungarian algorithm to associate.

- Outdoor surveillance system (2017.02 - 2017.07)

    – Implemented and optimized Kernelized Correlation Filter tracking algorithm to integrate in DSP chip.
    – Constructed panorama image from pan tilt zoom camera using Optical Flow.

Gameloft Han Studio
Game developer intern | Hanoi, Vietnam   2014.06 - 2014.08

- Developed rendering platform using OpenGL ES and OpenGL SL.
- Created a 2D endless running game.

AWARDS
- **Scholarships for deserving students**, University of Pisa   2019
- **Best Young Employees**, Viettel Research and Development Institute   2018
- **Scholarship of Hessian Ministry for Science and the Arts**   2012 - 2014

SKILLS   **Languages**: Vietnamese, English, Chinese.
                  Programming: `Python`, `C++`