THANH NGAN PHAN

San Diego, CA
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EDUCATION

University of California, San Diego *September 2021 - December 2023 (Expected)*
Bachelor of Science, Computer Science

Santa Monica College *August 2019 - June 2021*
Non-Degree Seeking, Transfer Preparation

ACADEMIC EXPERIENCE

Introduction to Computer Architecture, University of California, San Diego
Acquired comprehensive understanding of the various components that form a computer system and the functionalities of the CPU, memory units, and their interconnections to facilitate computer performance.

Components and Design Techniques for Digital Systems, University of California, San Diego
Gained insight of finite state machines, Mealy and Moore machines, practiced in design techniques for digital system, combinational modules, combinational logic and universal gates.

Intro to Machine Learning, University of California, San Diego
Experienced with important ideas in supervised learning algorithms: k-nearest neighbor classifiers, decision trees, perceptron, SVM, and regression.

AI: Search and Reasoning, University of California, San Diego
Learned and applied in practice with Python key concepts and algorithms in searching and reasoning: Classical Search, Adversarial Search, Markov Decision Processes, Reinforcement Learning, Monte Carlo Tree Search, Constraint Solving and Propositional Reasoning.

PROFESSIONAL EXPERIENCE

Teaching Assistant, YOLA English Center, Vietnam *March 2021 - August 2021*
Completed 100% daily reports on attendance and disciplinary performance.

Assisted in maintaining an engaging and respectful educational environment by promoting discipline and cooperation in an entire class session.

Tutored struggling students individually and in small groups of 1-4 students to reinforce learning concepts.

PROJECT

Thanh Phan's Website, `https://thanh-phan.netlify.app`
A functional website to inform and connect me and users, creates a professional and interactive space to allow users to have a better experience and be able to increase further interest in job recruitment. The web page is built by applying vanilla HTML, CSS, and JavaScript.

MiniMA (Minimal Machine Architecture), `https://github.com/tngPhVN/MiniMA-computer-architecture`
MiniMA is a small-scaled design of computer architecture, built using SystemVerilog and Python, that adapts the original load-store and accumulator machines with a change in the number of bits using, 9-bit machine code. The intention of this design is to prioritize simplicity in memory while able to ensure time efficiency.

SKILLS

Respond quickly to new instructions, situations, procedures and strive to improve performance.

Successfully identified individuals needs to be able to provide appropriate and timely supports in a group settings.

Solid understanding in high performance data structures and supporting algorithms. Have experience in performance analyzing, extensive working with data structure in C++ and Python.

Accumulated skills in software development involving designing, implementing and testing. Successfully applied and contributed to a collaborative team-setting project applied Agile practices.

Tools: VSCode, ModelSim, Quartus, Git, Jupyter Notebook.

Language: C++, Python, HTML, CSS, JavaScript, C, SystemVerilog.