

HOA NGUYEN

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EXPERIENCE

DArchR Lab, University of California, Davis

May 2020 - Present

Applications Programmer

Davis, CA

- Contribute on gem5, gem5art and gem5-resources.
- Port Python scripts to be compatible with both Python2 and Python3.

Department of Mathematics, University of California, Davis

October 2019 - March 2020

Undergraduate Reader/Grader

Davis, CA

- Grade and give feedback to homework assignments of Introduction to Abstract Mathematics course and Undergraduate Mathematical Optimization course.

RESEARCH EXPERIENCE

DArchR Lab, University of California, Davis

January 2018 - March 2020

Undergraduate Research Assistant

Davis, CA

- Contribute to the gem5 project, an open-source hardware simulator.
- Implement the ARM ISA support for FlexCPU, an abstract out-of-order CPU in gem5.
- Involve in the gem5art project, write packer scripts for automating the process of create gem5-compatible disk images containing installed benchmarks.
- Write tutorials of conducting gem5 full system experiments with SPEC 2006 and SPEC 2017 workloads.

Ian Davidson's Lab

November 2018 - March 2020

Research Experience for Undergraduates,

Davis, CA

- Work on the experiment and reproducibility parts of Block Model Guided Unsupervised Feature Selection paper.
- Implement various machine learning algorithms on PyTorch and Tensorflow.
- Parallelize the data pipeline to maximize hardware utilization.
- Handle and pre-process data used in various experiments.

PROJECTS

See [here](#)

SKILLS

Proficient

C++, Python, git, Bash scripts, Linux tools (e.g. awk, sed, grep), Docker

Familiar

Java, MongoDB, PostgreSQL, Packer, multiprocessing/multithreading, MATLAB, NumPy, CUDA, PyTorch, Tensorflow, SCIP, OpenMPI, OpenMP, Julia, QEMU.

EDUCATION

University of California, Davis

March 2020

Bachelor of Science in Computer Science, minor in Mathematics

AWARDS

Third Prize - Vietnamese Olympiad in Informatics

Nationwide competitive programming competition for high school students to select students to participate in International Olympiad in Informatics (IOI).