

Profile

Name: Martinez Noriega Edgar Josafat (エドガー)

University: The University of Electro-communications.

Current Status: PhD. Student 3rd Year -HPC - Narumi Lab.

Nationality: Mexican, from Mexico City (Tlaltenco,Tlahuac)

Languages: Spanish,English and Japanese(Speaking only)

Contact: edgarjosaf@gmail.com

Research Interest

High Performance Computing on Mobile Devices

GPU virtualization

Parallel Computing — GPGPU, MPI, MThreading

Cloud Computing, Real time visualization.

Master in Computer Science

Computer Science Course – Narumi Tetsu Laboratory

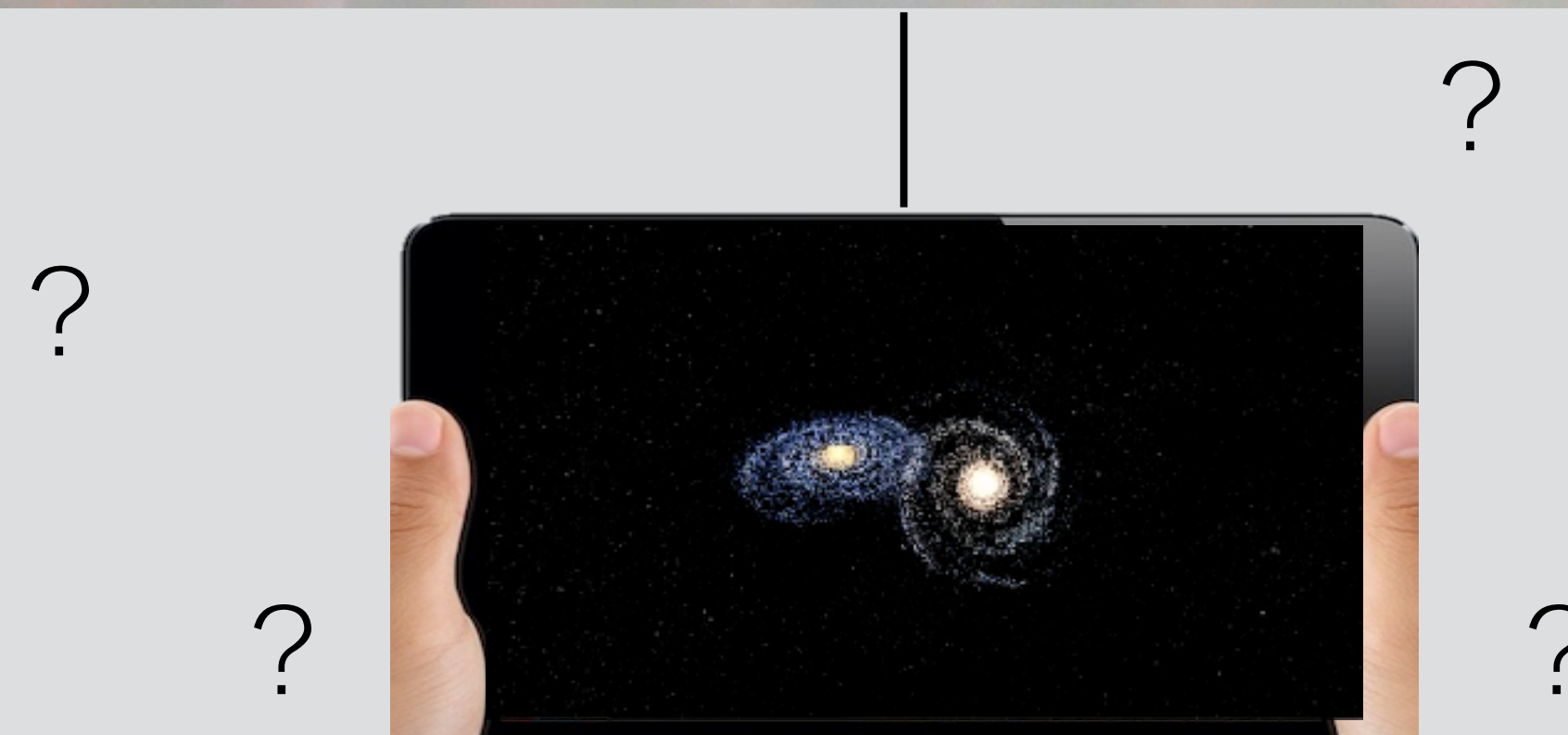
“High Performance Computing on Mobile Devices”

Bachelor

Computer Engineering – National Polytechnic Institute of Mexico

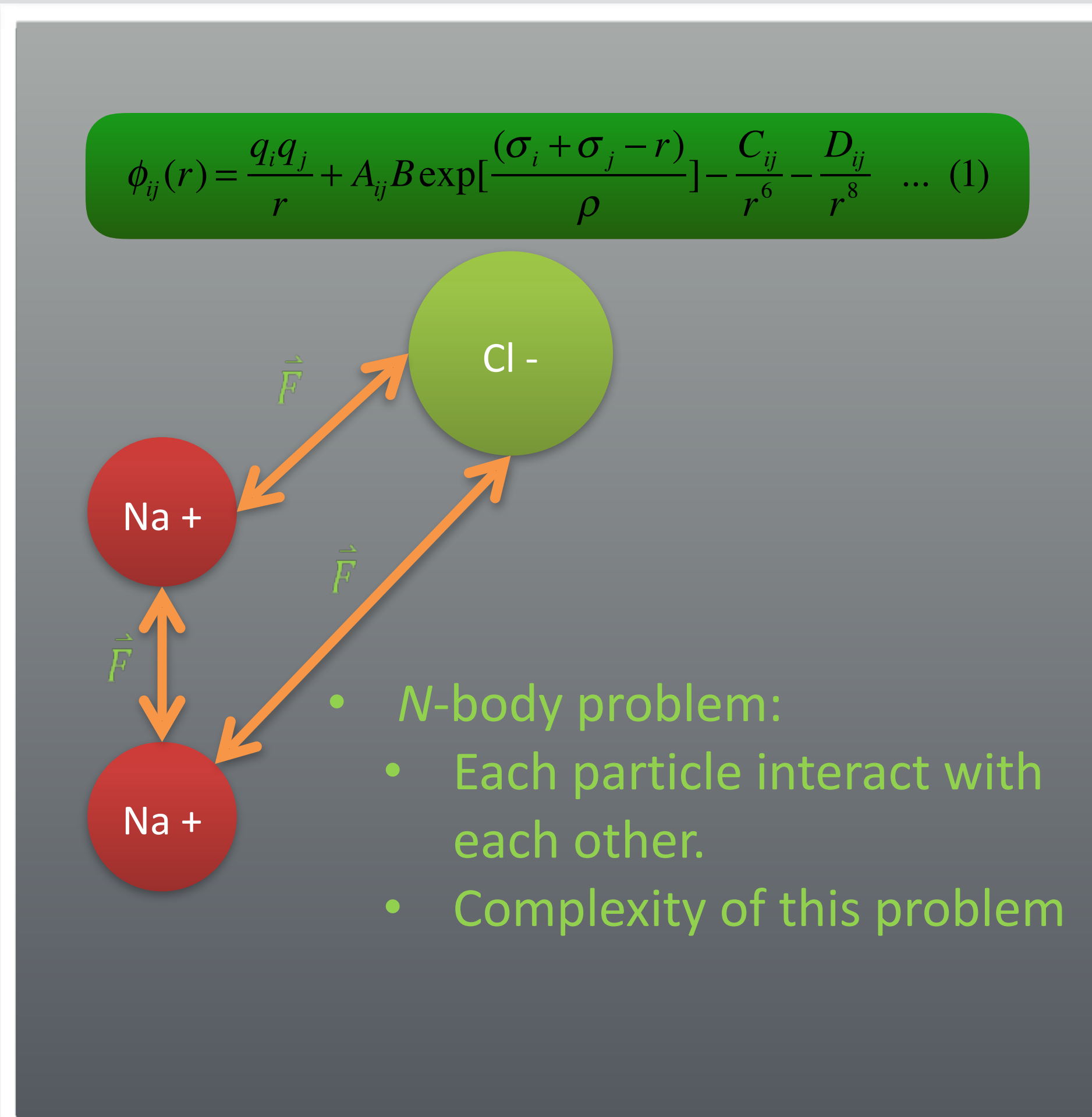
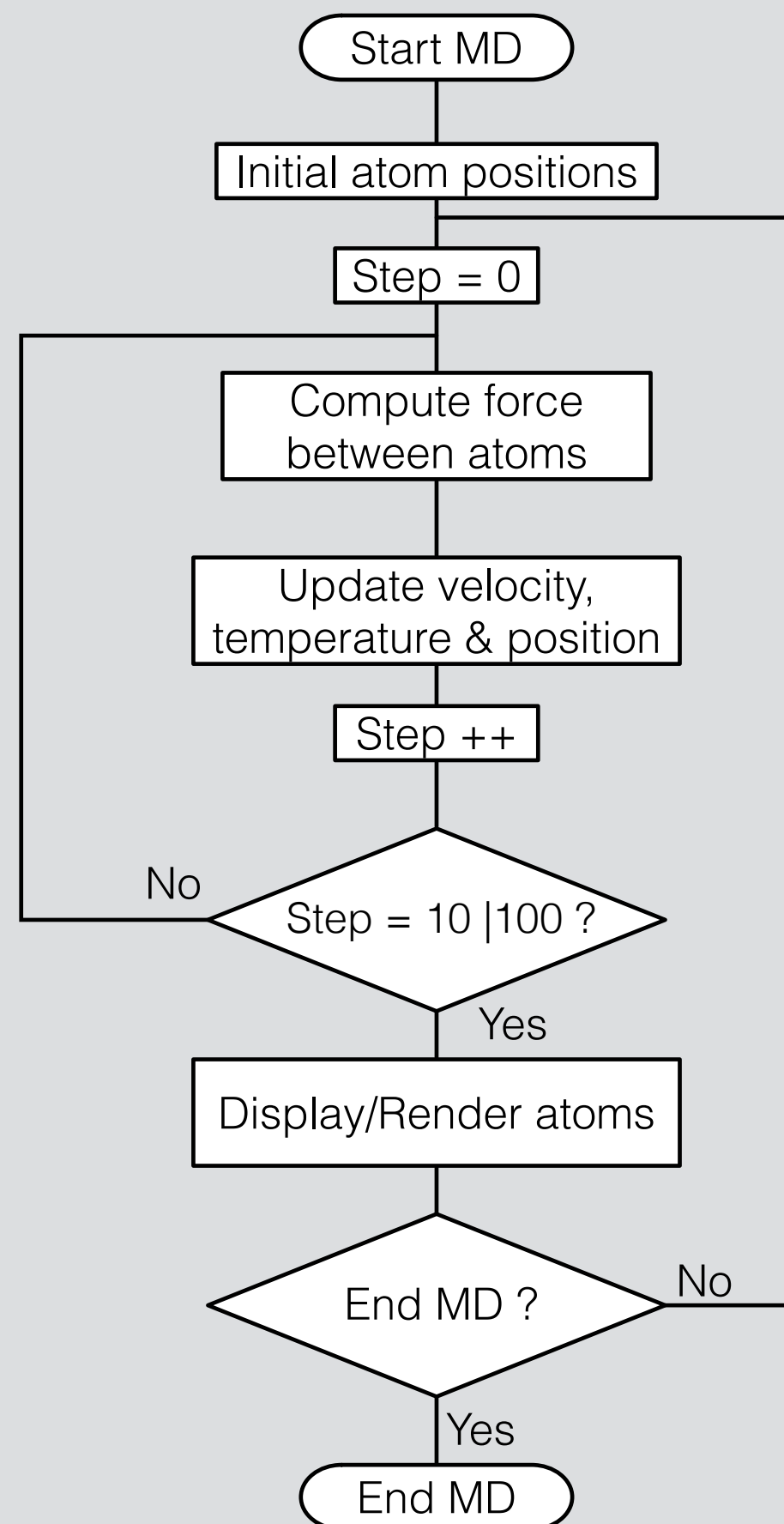
4th year – Exchange Program “JUSST” at UEC Tokyo.

“Performance Improvement on Simulation and Visualization of Molecular Dynamics through CUDA Architecture”

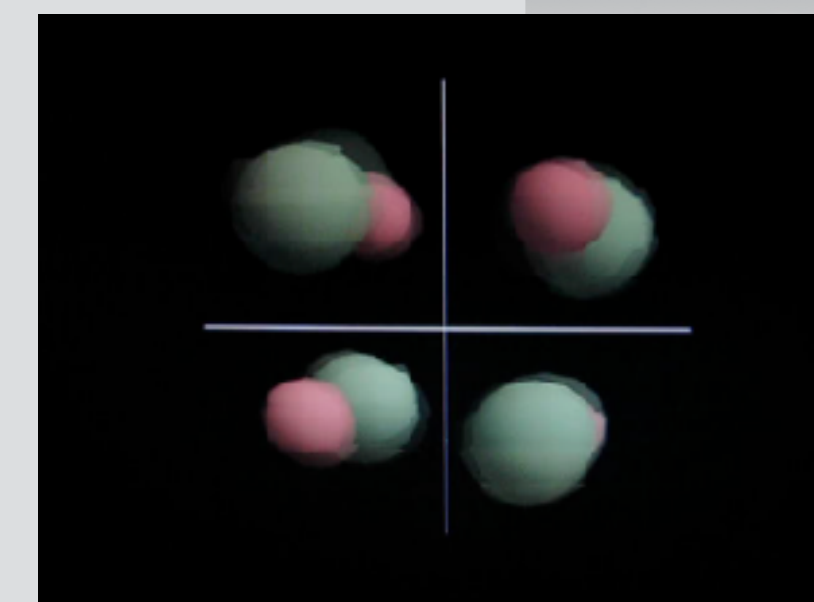
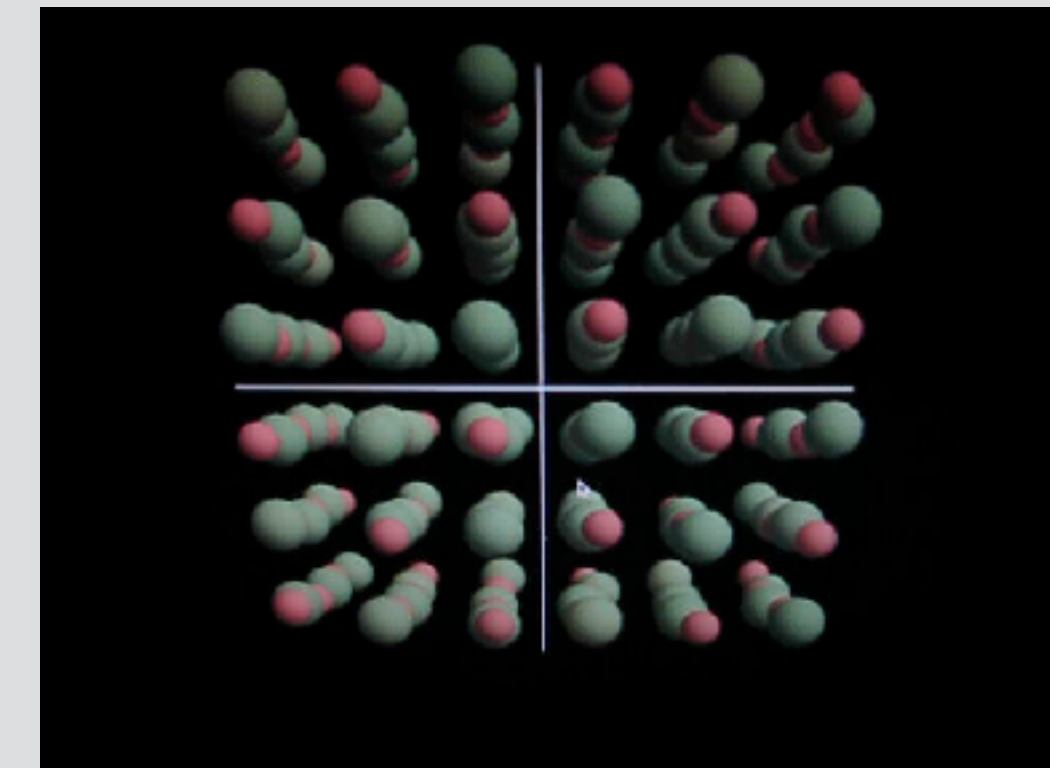


Simulation details

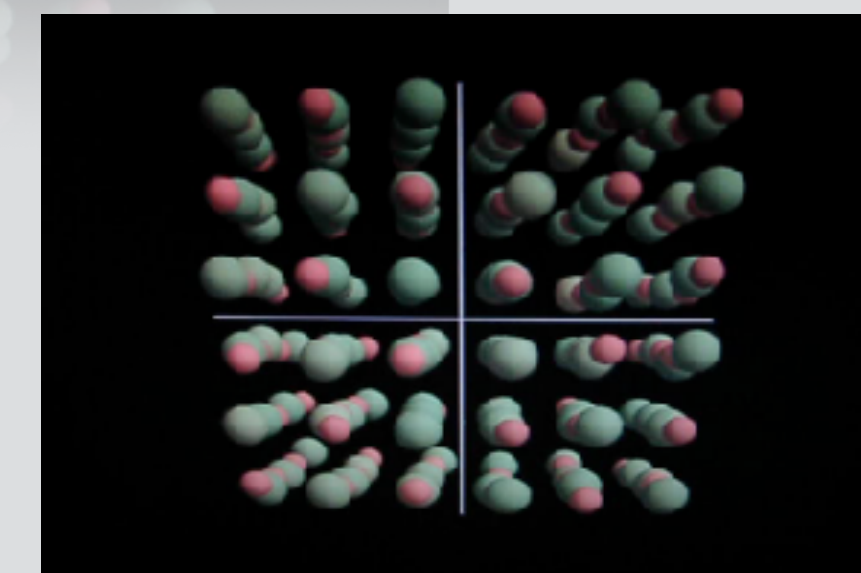
Basic Algorithm



Claret



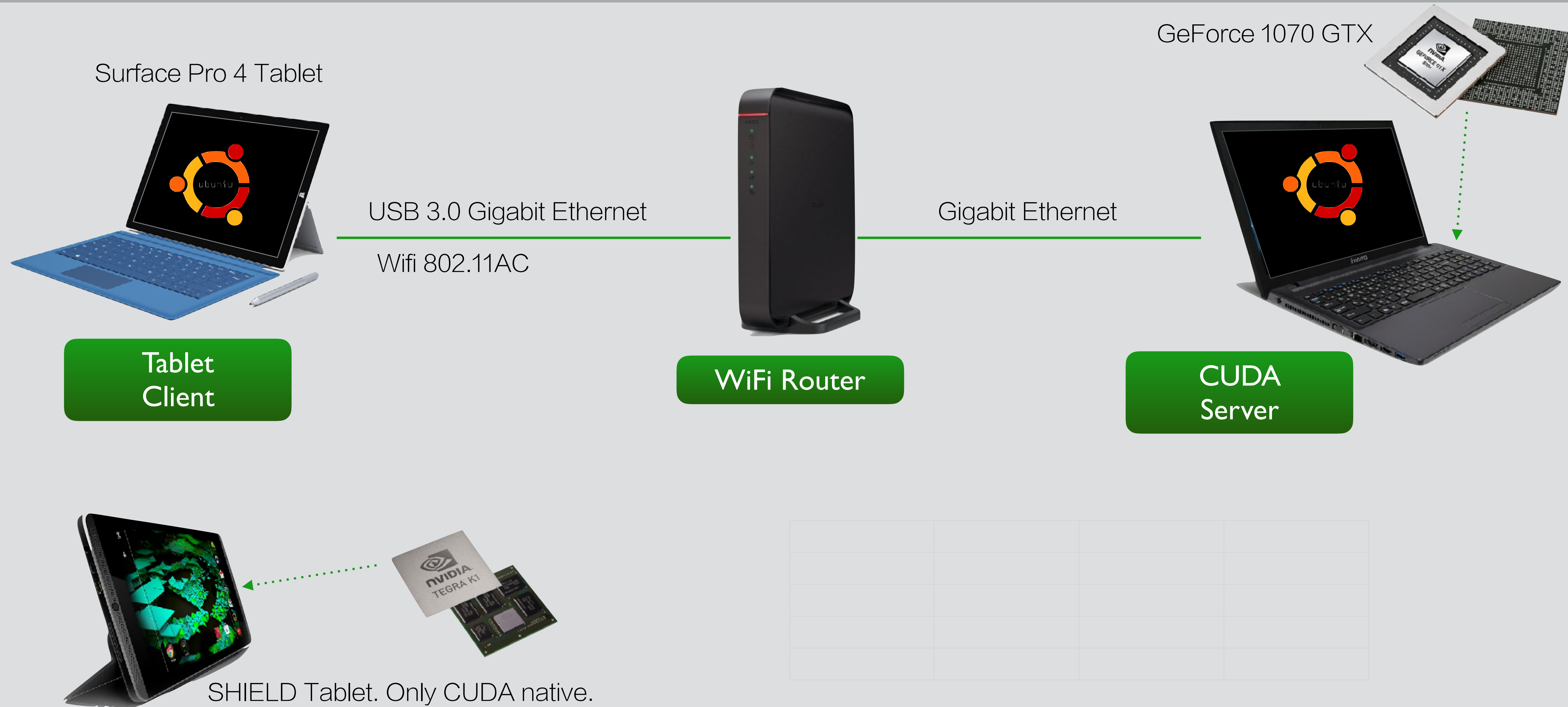
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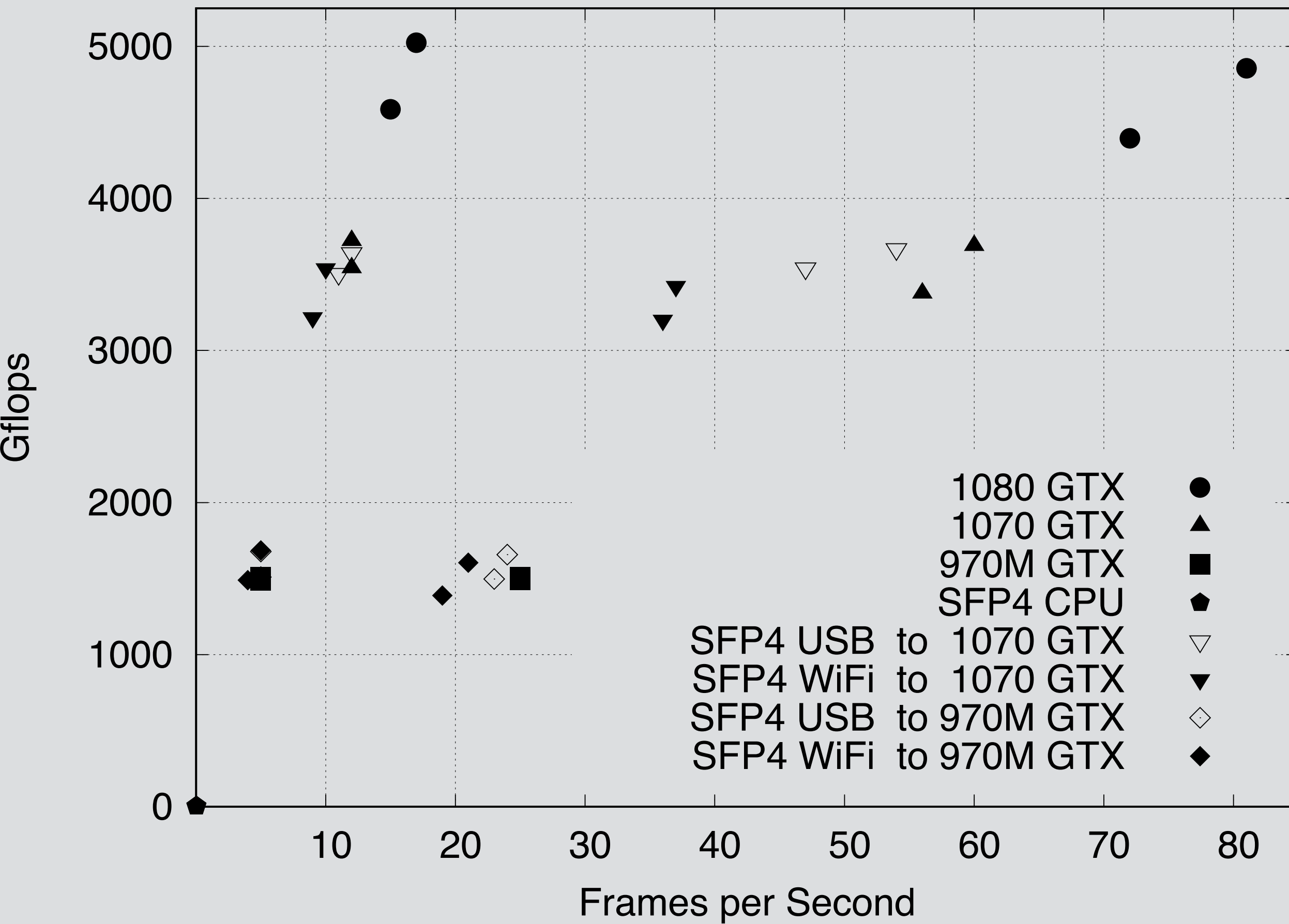
Graphic Detail

Original source code by Takahiro Koishi. Code available on <http://atlas.riken.go.jp/~koishi/claret>

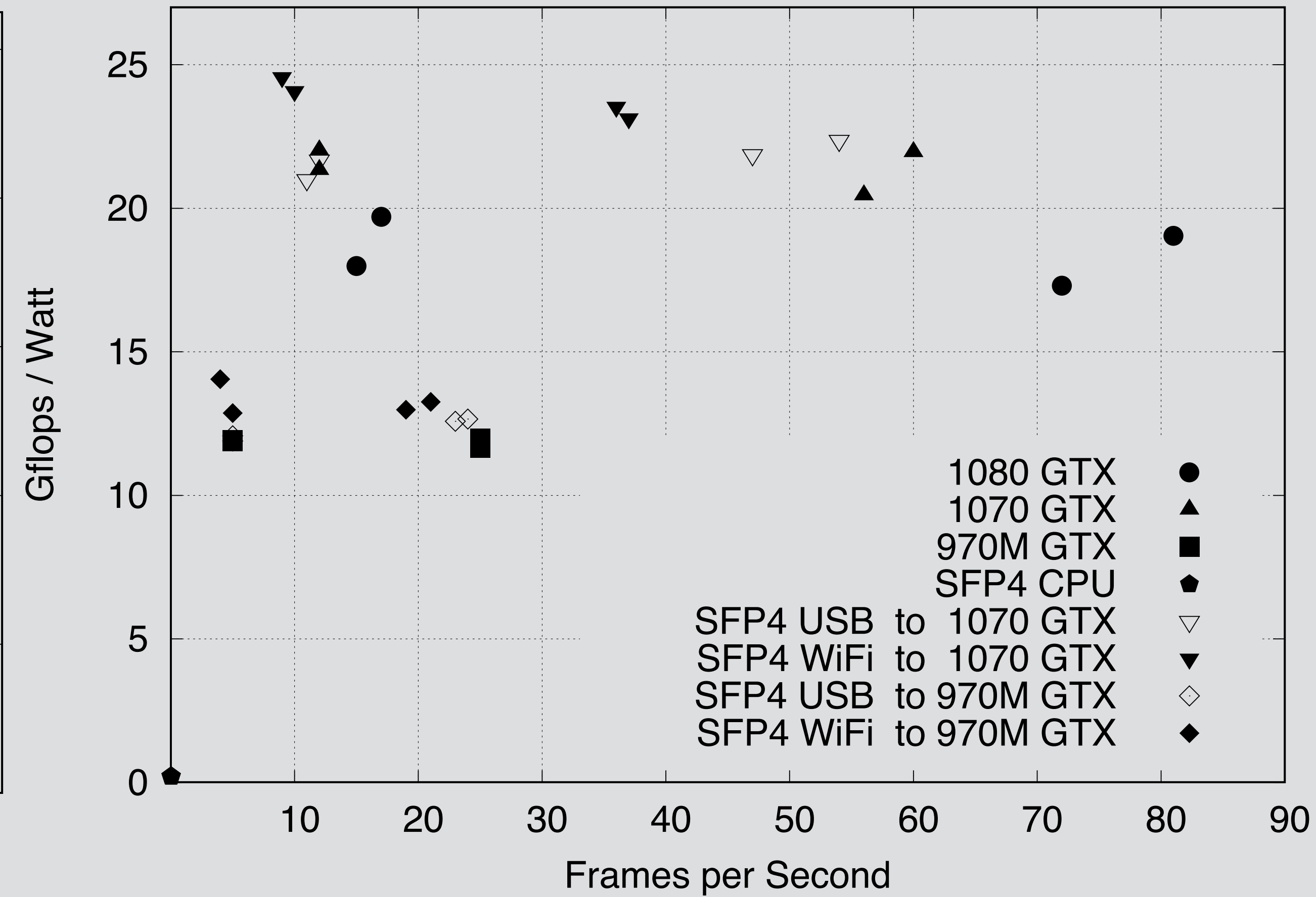
System proposal



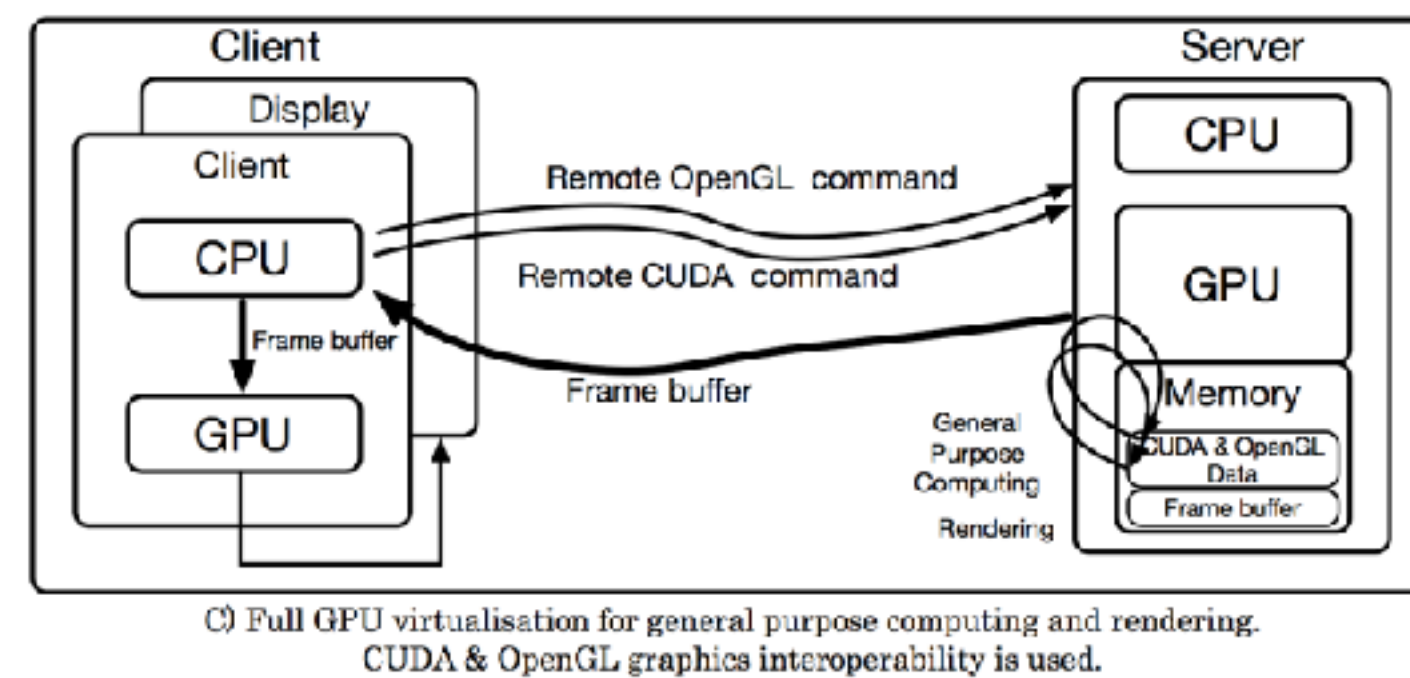
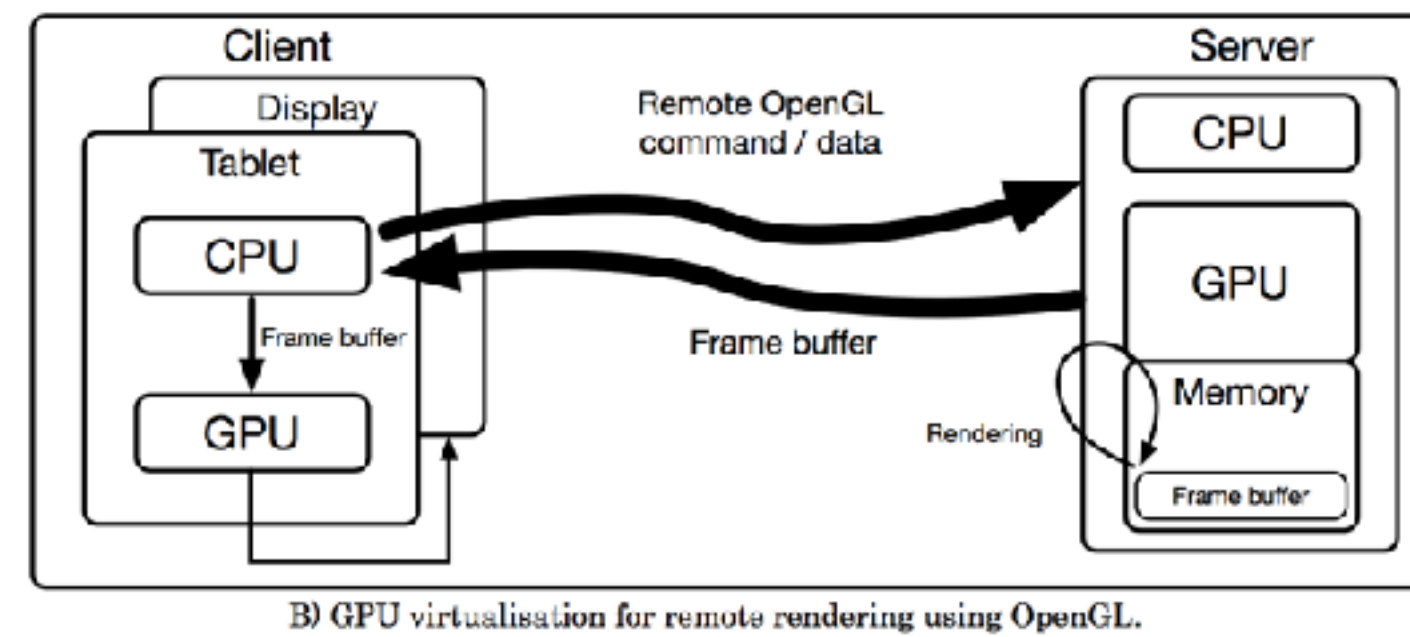
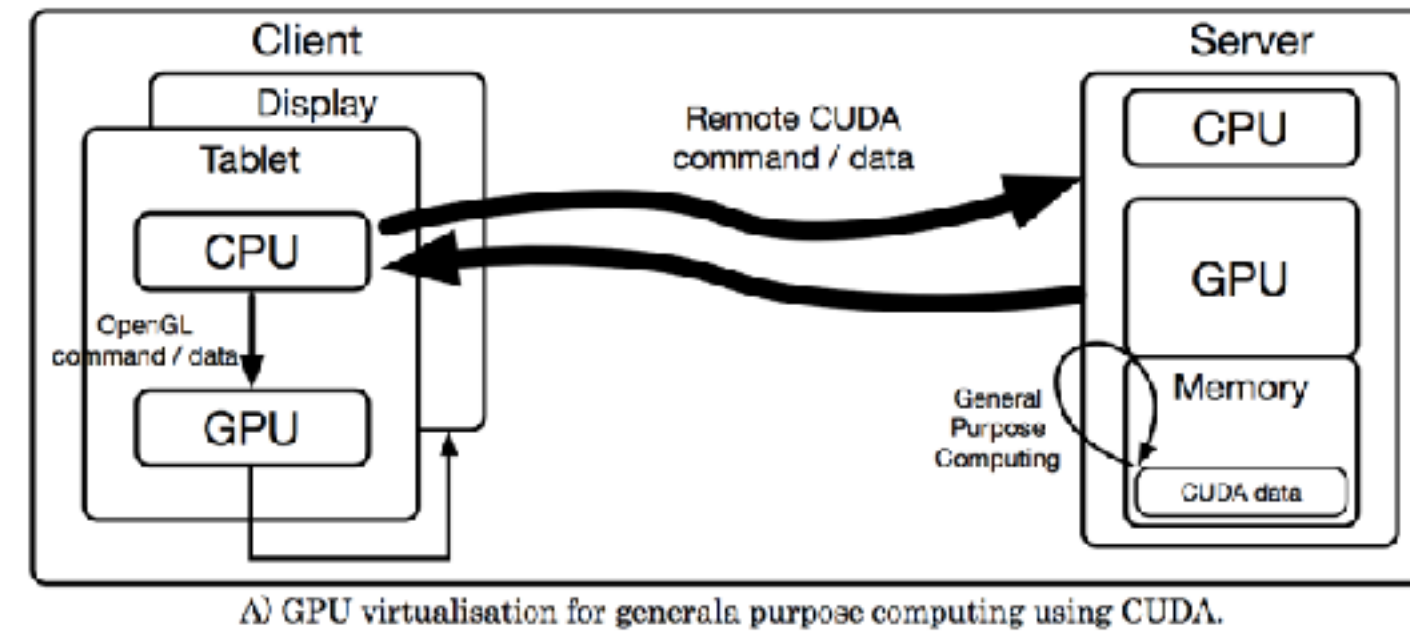
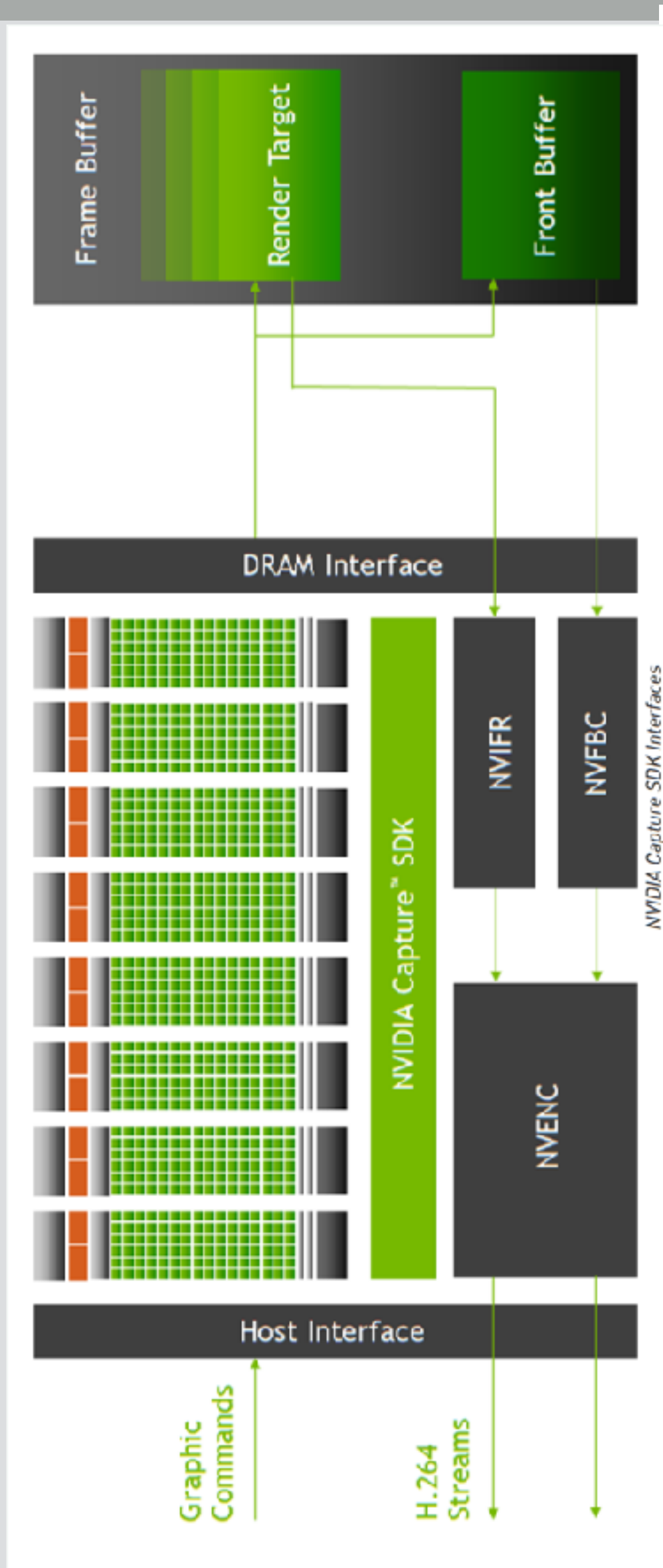
Computation Efficiency



Power Efficiency



Future work



Remote CUDA

Remote OpenGL

Remote CUDA + OpenGL