

August 23rd (mon).

CMPE240

HARRY LI.

E-mail: hual@sisw.edu

Text message (650) 400-1116

Office Hours: M.W. 3:40-4:40 pm.

Advanced Microprocessor Systems

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Prototype System  
with a CPU module

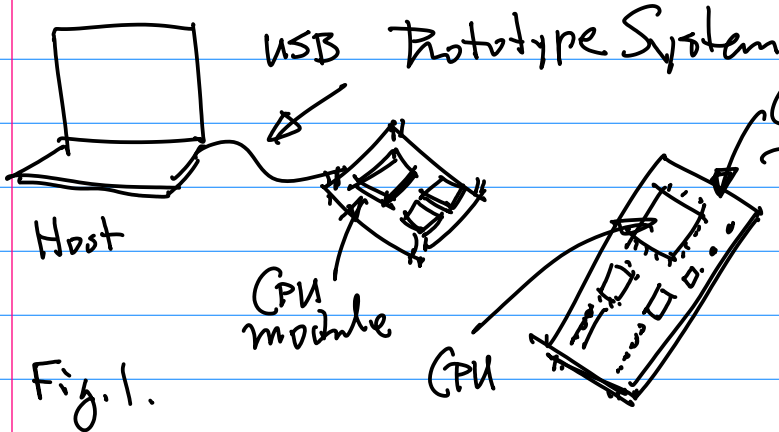


Fig. 1.

GPU (Graphics Processing Unit), Array of Processors, Machine Learning, AI, Autonomous Systems, Nvidia Jetson TX2.

Text Books, References

1. NXP LPC1769 GPU Datasheet  
800+ pages Homework: Download pdf. Before  
Next Monday, Aug. 30th.

2. LPC1769 Schematics of the CPU module

3. Nvidia Jetson Nano Datasheet on TX2 (6 CPU + 256 GPU)  
400+ pages. 5% Bonus.  
(Optional)

4. TISC-V. Open Source Architecture, A Super Set of ARM, FPGA, Verilog, SoC. +RTOS. (Optional)

A Proposal (One +5% Paragraph) By Sept. 1st (Wed). Submit to my Email;

Note: Buy LPC1769 CPU module.

digi-key.com, mouser.com, etc.

Grading Policy & Projects  
2 projects (Phase I & II)

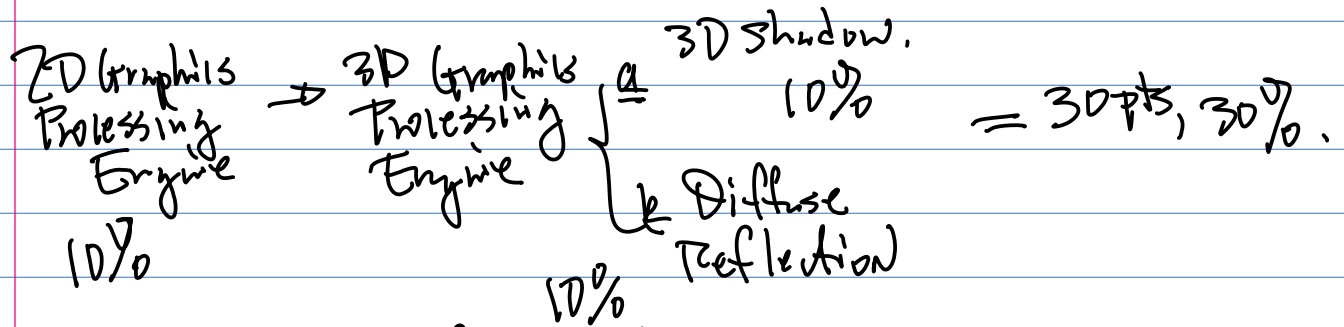
2D Graphics Processing Engine

3D Graphics Processing Engine

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## CMPE240

2.



midterm: 30%, Final 40% (Comprehensive)

Option 1. (5%+) NvDA NANO

- a. Likely Devices Drivers, O.S. C/C++, Python.
- b. I/O Interface: "EdgeAI"  
GPIO, SPI.

Option 2. (5%+) RISC-V Target

SoC, FPGA Board,

Proposal (one paragraph), Submission  
By Sept 1st (Wed) via e-mail.

Policy ON Project Submission.

1<sup>o</sup>. Form 3-4 person Team.

2<sup>o</sup> No Source Code/Design material  
Can be Copied; All Course  
material has to be completed  
individually;

3<sup>o</sup> Late Project, 10% per week;