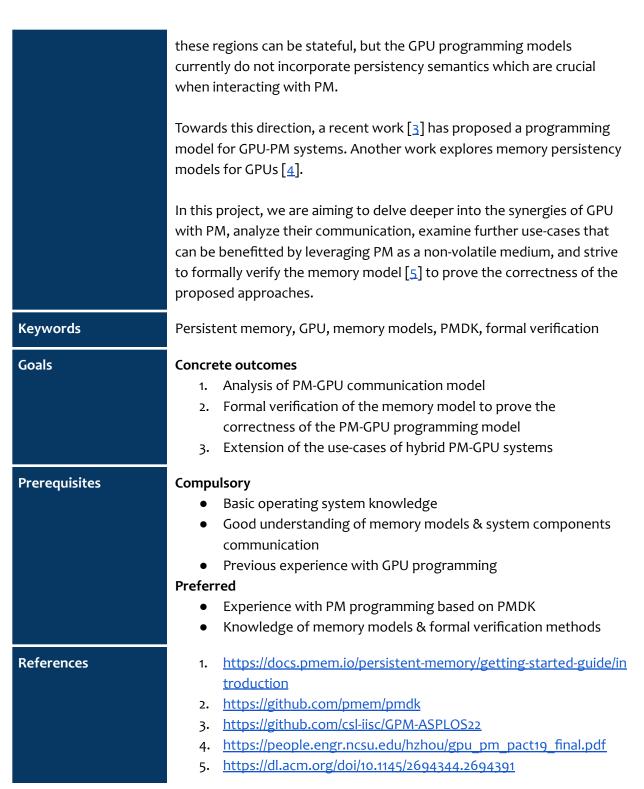


## Persistent memory - GPU synergy and memory model analysis

General information	Advisor	Dimitrios Stavrakakis
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	Date	17.01.2022
Туре	Master / Bachelor / Guided Research	
Description	centers. It res in byte granu	emory[1] is a recently added layer in the system stack of data sides on the memory bus and provides read and write access larity with latencies close to DRAM. Along with these also a non-volatile storage medium.
	This unique combination of features has opened up a way for a new programming model targeting to manipulate this medium and reap its benefits. Having that in mind, Intel developed <u>PMDK[2]</u> , a collection of libraries and tools for system administrators and application developers to simplify managing and accessing persistent memory devices.	
	can be directl property ope state-of-the-a offload dema highly-paralle	happed into the virtual address space of an application and y accessed via conventional load/store instructions. This ns up the way to discover the PM synergies with irt technologies like GPUs. So far, GPUs are leveraged to nding computations from the CPU and perform them in a I, high-performance manner. CPU-GPU communication is bugh memory mapped regions. With the introduction of PM

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## **Application process**

Please send an email to the advisor including the following:

- Email subject: "Thesis application (DSE)"
- CV
- A copy of your transcript(s)
- A motivation statement, please include samples of your work that you are proud of (e.g., major projects, open-source contributions, Github page, etc.) and/or writing samples (e.g., your technical blog, project reports, etc.)