

1. Identify needs that justify an electrical and computer engineering problem-solving effort
 - Power needs
 - LLM are trained using large amounts of computing power and servers, all which need to be cooled due their excessive heat. This cooling uses a substantial amount of water, causing environmental concerns as the need for AI advances.
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2. Develop a design proposal that justifies the need to develop a technical solution to a problem
 - Water efficient power supply and/or cooling system that can be built for these systems.
- Objective (why?)
 - Current AI and supercomputers consume a lot of water to power their systems. Limiting the amount of water used would be extremely beneficial.
- Background (who? where?)
 - People who are interested in AI and the environment. Big GPU and CPU tech companies would be interested in such a solution as it would vastly improve their computing efficiency.
- Methodology (how? when?)
 - By creating algorithms that are highly efficient and need less power to reduce cooling needs. This would be done when there are major leaps in LLM power efficiency.
- Expected results (what?)
 - Increase the efficiency that LLM compute task to reduce overall consumption of water or other cooling resources
- Costs (how much will it cost?)
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