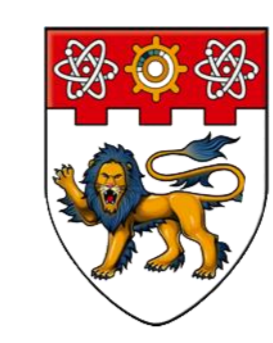


Building Energy Efficiency-EMOCS for HVAC Processes

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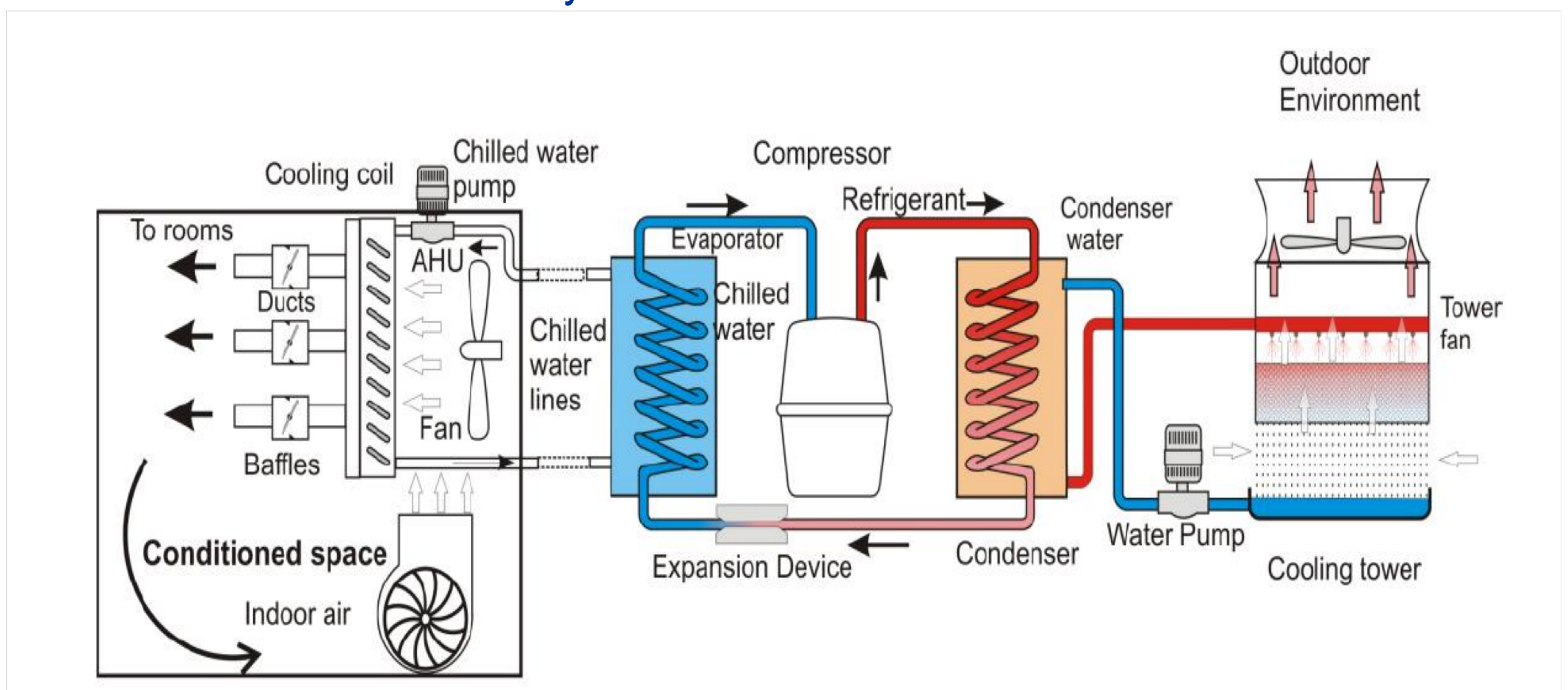
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I. Objectives

The main objectives of this project are to develop a system level optimization and control technologies for building Heating Ventilation and Air-Conditioning (HVAC) systems, and to integrate them into a Software Package that will work with existing sensors, actuators, Building Automation Systems (BAS) and Energy Management Systems (EMS) to minimize the energy consumption while meet the indoor air quality requirement. Specifically, new methodologies are proposed for modeling, real-time optimization and dynamic control which can be applied not only to HVAC processes, but also other complex industry processes.

II Schematic of EMOCS based HVAC System



III. Side View of EMOCS based HVAC System

