Typical object-oriented development techniques assume target systems have relatively large amounts of RAM available to the user. Developers working with tight memory requirements also need the flexibility and encapsulation which OO can provide, but cannot afford to produce systems with large memory requirements. This tutorial will describe how you can use OO techniques in a memory-constrained environment. Using an approach based on design patterns and practical examples, this tutorial will explore some of the most important techniques that successful designers use in object-oriented systems for small memory machines.

This tutorial will help participants manage object-oriented development in limited-memory environments. The tutorial will present specialized design patterns, including patterns for preparing and managing memory budgets, designing and allocating object structures, transparently exploiting auxiliary storage, and tailoring user interfaces for small machines. The patterns will be illustrated with case studies to provide experience for the participants in designing their own solutions.