

Parallel Computing Using Message-Passing Interface: An Introduction

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Abstract

This talk covers the very basics of parallel computing and message-passing interface (MPI). In the first part, it provides a very quick overview of the broad topic of parallel computing, including what it is and how it's used, along with an introduction on concepts and terminology associated with parallel computing. In the second part, it begins with the basics of MPI, followed by an enumeration of the MPI routines that may be most useful for new MPI programmers, including Point-to-Point and Collective Communications routines, with examples in C. This talk is to be general and extensive (instead of being in-depth), and is intended for one who is just becoming acquainted with the subject of parallel computing and MPI.