Since millennial calendars and perfect geometry of the pyramids, since the first computer 47 years ago, since foundation of the first Computing Research Center 7 years ago, computing in Mexico has rich history, solid tradition, excellent present, and brilliant future.

This volume contains 22 careful elected papers by 52 authors, who are, in accordance with famous and this volume, mainly from Mexico, but also from USA at into five groups:

Robotics and vision, including spen topics as planning, mobile robots, motion prediction, noise cancellation filters, wavelets analysis, and visual authentication;

Natural Language Processing, including such topics as information retrieval, information extraction, and software infrastructure for natural language processing;

Algorithms, including such topics as time series forecasting with neural networks, discrete optimization, and object identification using neural networks;

Software Technologies and Databases, including such topics as cryptography, agent technology, web services, video-on-demand optimization, database integrity, and spatial databases;

Hardware and Control, including such topics as telemetric systems and digital-based control of engines.

ISSN: 1665-9899

INSTITUTO POLITÉCNICO NACIONAL

