The National Institute of Systems Test and Productivity (NISTP) is a State of Florida Type II Center, placed administratively within the College of Engineering and functioning in close cooperation with the College of Business Administration. NISTP receives its primary funding from the U.S. Space and Naval Warfare Systems Command (SPAWAR) with additional funding from other governmental agencies (e.g., the Missile Defense Agency) and corporations (e.g., Boeing). The Institute’s USF efforts involve researchers and graduate and undergraduate students from the Colleges of Engineering and Business Administration as well as industrial collaborators. Researchers from other academic institutions, both in the US and abroad, and from the SPAWAR San Diego facility are also conducting Institute sponsored projects.

Mission – The mission of the Institute is threefold: research, support, and education.

Research – This component focuses on the development and application of new techniques for the automated testing of complex computer systems. These systems range from ones which provide guidance for a missile or monitor an array of data sensors to complex, battle management systems whose constituent components are themselves complex systems. The techniques and tools produced by the Institute will support the thorough, yet efficient, testing of systems, thereby enhancing overall productivity and system security.

Support – In addition to the development of tools and techniques, the Institute is also significantly involved in providing direct advice, assistance, and analysis to government agencies and their development agents who might need specific help in solving immediate problems of system test, security and productivity.

Education – The Institute recognizes that relatively widespread education/training must be in place if developers are to effectively employ newly developed testing methodologies. In addition, there is a growing need for students who are prepared to enter the workforce and begin a career path in the system testing domain. Toward this end, graduate and undergraduate courses that address systems and software testing and productivity are available to students at USF; distance video and web-based learning opportunities are employed to provide important vehicles for knowledge dissemination; finally, NISTP continues to explore more efficient, successful content and delivery systems that will prove effective in serving the education and training needs of systems and software professionals.

People
The Institute’s Executive Director is Dr. Abraham Kandel with Deputy Director Dr. Dewey Rundus and Director of Operations Dr. Robert Carnahan. The Institute’s Principal Investigator at the University of South Florida is Dr. Abraham Kandel with Dr. Alan Haver from the College of Business Administration.