CHRISTIAN E. SPANU

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PROFESSIONAL SUMMARY:

- 12+ Years of Manufacturing Experience and Research in Engineering
- Supervise Professionally Groups and Individuals during Research Projects
- Assembly and Coordinate Interdisciplinary and Multi-Cultural Teams
- Machining Efficiency Tests: Design, Set-Up, Control, Results Dissemination
- Advanced Scientific Data Acquisition, Processing, Analysis, and Report
- Co-operation and Funding Proposals: NSF, NASA, Governmental Funds, Industry
- Ergonomics and Occupational Biomechanics Research
- Strong Programming Skills and Advanced Computer Expertise
- Web Master: Concept, Realization, and Maintenance of Internet sites

EDUCATION:

The University of Toledo *Toledo, OH* *May 2004*
Doctoral Degree, Ph.D. in Engineering GPA: 3.92/4.00

The University of Toledo *Toledo, OH* *Dec 2000*
Masters' Degree, M.S. in Industrial Engineering GPA: 3.87/4.00

Technical University of Iasi *Iasi, Romania* *June 1989*
Masters' Degree, M.S. in Manufacturing Engineering GPA: 3.90/4.00

Technical University of Iasi *Iasi, Romania* *June 1988*
Bachelors' Degree, B.S. in Mechanical Engineering GPA: 3.80/4.00

EXPERIENCE:

Precision Micro-Machining Center *Jan 2004-present*
The University of Toledo, College of Engineering, Toledo, OH
Chief Engineer

- Coordinate and supervise research activity in abrasive machining
- Promote co-operative projects with academic and industrial partners
- Implement industrially Electrolytic In-Process Dressing (ELID) assisted operations
- Assemble, lead and coordinate multi-disciplinary R&D and production groups
- Research on ceramic materials: tribological and machining characterization
- Supervise applied research at graduate level

Precision Micro-Machining Center *Sept 2000-Dec 2003*
The University of Toledo, College of Engineering, Toledo, OH
Senior Research Associate

- Optimize double sided grinding of advanced ceramics
- Prove superiority of grinding over lapping in ceramic abrasion: 12-time more efficient
- Select best fluid and cooling strategy for advanced ceramics fine grinding
- Improve machining efficiency using ELID technique
- Research in crack-free machining of ceramics
- Supervise 10+ graduate research projects: micromachining, wheel topography
- Web Master: www.eng.utoledo.edu/pmmc

EXPERIENCE: ***(continued)***

Biomechanics and Assistive Technology Lab. *Jan 1999-Sept 2000*
The University of Toledo, College of Engineering
Research Assistant

- Redesign knee replacement prostheses: 40 degrees range of motion improvement
- Design and operate new integrated video-force plate data acquisition system
- Reduce spine pain during professional manual transfer activities

Automation & Flexible Manufacturing Systems Lab. *Jul 1996-Jan 1999*
Technical University of Iasi, Iasi, Romania
Co-Founder and Lab. Assistant Director

- Promote original codification algorithm for automatic manipulation
- Improve efficiency of transfer lines and conveyors in FMS
- Supervise graduate level research and seniors projects

Industrial and Manufacturing Engineering Dept. *Jan 1996-Jul 1996*
The University of Rhode Island, Kingston, RI
Visiting Researcher

- Improve assembly efficiency of PC unit: DFMA & DFS
- Reduced environmental impact at computer's end-of-life disposal
- Cooperative research projects FORD, IBM

Manufacturing Engineering Department *Sept1990-Jan 1996*
Technical University of Iasi, Iasi, Romania
Assistant Professor

- Research in automatic systems of material manipulation
- Teaching and research supervision in Automation and Manufacturing Technologies

Prototypes Design Department. *Sept1989-Sept 1990*
Tools and Special Accessories, Pascani, Romania
Design Engineer

- Design prototype for special automatic drilling device
- Supervise project for automatic tool selection and tool transfer system

HONORS & ACTIVITIES:

- Society of Manufacturing Engineers (SME): President of The University of Toledo's Student Chapter since January 2004, member since 2003
- American Ceramic Society (ACerS): member since 2003
- The Abrasive Engineering Society, Industrial Diamond Association of America (IDA): member since 2004
- Co-Chaired 2003 NAMRC 31 Conference in Hamilton - Modeling Section
- SME Instructor for Superabrasives Certification Course: June and Oct. 2002
- Recipient of Departmental Outstanding Teaching Assistant Award for 2001
- Conference Coordinator the Abrasive Micro-Machining Consortium 2001 Meeting
- Editor of The Proceedings of the International Conference “Modern Technologies in Machine Manufacturing”, Iasi, Romania, 1998