

CPATH 2008 Portfolio

Transformative Implementation Projects

CNS 0829656, 0829641 – Collaborative: Wendy Tang, Stony Brook and Simona Doboli, Hofstra

Project ExCE2L – Excellence in Computing Entrepreneurship Education and Leadership

Creates computer science and computer engineering entrepreneurial program and minor at both institutions; includes a well-developed international collaboration with Germany, Romania, and South Korea

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TI/Community Building

CNS 0829533 – Steven Reiss, Brown

Applied Computer Science for the Humanities and Social Sciences

Develops integrated resources and courses for teaching humanities and social sciences computer science concepts needed for their disciplines; has an emphasis on data and modeling

CNS 0829671 – Amber Settle, Depaul

Computational Thinking across the Curriculum

Develops a framework for integrating computational thinking across all disciplines in the liberal studies curriculum; has broad interdisciplinary collaboration

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Conceptual Development and Planning

CNS 0829647 – Leen-Kiat Soh, U. Nebraska

Renaissance Computing

Redesigns core computer science curriculum with infusion of computational thinking across the university; develops computing core, computing electives for majors and non-majors; features excellent collaboration with all disciplines across campus

CNS 0829607 – Vijay Narayanan, Penn State

Integrating Biology and Computing: Empowering Future Computing Professionals

Integrates biology and computing; involves 23 faculty and 14 academic disciplines; includes outreach to faculty from 4 year colleges

CNS 0829661 – Charles Dierbach, Towson U

Piloting Pathways for Computational Thinking in a General Education Curriculum

Creates a broad-audience core general education course and upper-level courses for applying computational thinking in many disciplines

CNS 0829667 – Giorcelli, Rebecca, Fairmont State

Advanced Computing Curricula and Expanding Learning Experiences through Re-engineered and Accelerated Technology Education

Integration of educational pathways for information systems, information technology, and computer science students at Fairmont State and at a local community college; works with a West Virginia regional technology consortium

CNS 0829609 – Detmer, Richard, Middle Tennessee State U

Project MT – A Real-World, Project-Based Computer Science Curriculum

Builds bridges to industry to develop a steady stream of industry-supplied projects; weaves real-world projects into entire computer science curriculum

CNS 0829683 – Francois Modave, U. Texas El Paso

An Integrated, Multidisciplinary and Cross-Fertilizing Model for Computing Education

Creates an integrated model for computing education for computer science, biology, economics, and finance; makes computational biology and economics pathways for students

CNS 0829619 – Yu Cai, Michigan Tech

Integrating Sustainability into Undergraduate Computing Education

Integrates sustainability into undergraduate education; develops a course on green computing; has a focus on power consumption in data centers

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Community Building

CNS 0829651 (RUI) - Scott Wallace, Washington State

Building the Northwest Distributed Computer Science Department

Develops a Pacific Northwest educational community to transform computing education, share resources and expertise; has a focus on small, teaching-oriented institutions

CNS 0829601 – Mark Guzdial, Georgia Tech

Improving Computing Education by Developing Regional Communities of Computing Educators

Creates a community of high school teachers and undergraduate educators within Georgia involved in computing education; encourages including teachers in computing research

CNS 0829558 – Roger Norton, Marist College

Developing a Professional Community for Introducing the Principles of Enterprise Computing Technologies into the Undergraduate Curriculum

Builds a community around an enterprise computing platform; involves many industry and academic partners; includes information technology, computer science, and information science areas

CNS 0829563 – Vicki Allan, Utah State

Computational Thinking Showcase: Computing Concepts across the Curriculum

Regional (across Utah) effort to test and implement interactive learning models for computer science education appropriate for first experience in high school and college as well as upper level courses

CNS 0829616, 0829625 – Collaborative: Lillian Cassel, Villanova and Manuel Perez, Virginia Tech

Distributed Expertise in Enhancing Computing Education with Connection to the Arts

Builds community around a distributed collaborative approach to computing education course development and practice through team teaching; extends scope of computing education to disciplines not normally linked to computer science