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Computer Science and Mathematics Collaborating to Create New Educational Opportunities While Developing Interactive Calculus Apps

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Abstract : Since 2006, the School of Computing and the Department of Mathematical Sciences have collaborated on several industry and NSF grants to develop new uses of technology in teaching and learning. Clemson University's Creative Inquiry Program allowed computer science and mathematics students to earn credit each semester for participating in seminars which introduced them to new areas for independent research. We will discuss how the development of three interactive instructional apps for Calculus resulted not only in a useful product, but also in unique educational benefits for both the computer science students and the mathematics students, graduate and undergraduate, involved in the development process.

Keywords: calculus, apps, programming, mathematics

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