

CSI Games: Thirteen Years of Innovation in Teaching

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Abstract

The CSI: Statistics Learning Trilogy showcases over ten years of ongoing growth in university statistics education. It was conceived, written, and developed entirely by Rosie Ching at Singapore Management University. The upcoming trilogy includes CSI: Agent on a Mission, CSI: The Academy Prequel, and the upcoming CSI: Back in Time. It transforms a subject that many find daunting into a global cinematic, game-based experience. Through engaging storytelling, realistic sound effects, and mission-focused learning, CSI redefines hypothesis testing, regression, and confidence intervals as exciting spy challenges and historical quests.

Built on the evolving technologies of Flash (2012), iPad (2014), and HTML5 (2022), CSI is available to anyone, anywhere, for free and without installation. More than 4,295 students have participated, with 95 to 100 percent reporting greater engagement and a better grasp of concepts. The iPad version has been downloaded in 54 countries. The game structure allows for both individual and large group play, accommodating up to 200 students at once.

CSI's consistent blend of storytelling, analytics, and easy access illustrates the lasting digital change in higher education. It represents a self-created techno-ed environment that continues to grow as new learning opportunities emerge.

Index Terms

Digital Pedagogy; Online Learning; Game-Based Education; Statistics; Scalability