

AMRUTH KUMAR



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Amruth Kumar (PhD in Computer Science from the University at Buffalo) is Professor of Computer Science at Ramapo College of New Jersey, Mahwah, NJ, USA. His research interests include Intelligent Tutoring Systems, Educational Data Mining, Computer Science education research and Computer Science education. He is the developer of proplets (proplets.org) and epplets (epplets.org) – two software tutoring suites on computer programming. His research has been funded by several grants from the National Science Foundation. He is a Distinguished Member of the ACM and Senior Member of IEEE.

Keynote Speech: 15 Years of Developing, Evaluating and Disseminating Programming Tutors: Lessons Learned

The past can inform the future when it comes to pushing the boundaries of ITS. Based on the experience of developing, evaluating and disseminating two suites of software tutors for computer programming, viz., proplets and epplets, I would like to proffer some lessons learned. Among those are: How correct is a pragmatic alternative to why incorrect; Learning gains are not always commensurate with development costs; An ounce of direction is worth a pound of correction; Can do is not the same as should do; Solving ill-defined problems is about knowing what to ask and when; Mastery learning assessed in terms of effort rather than correctness; All that glitters in the laboratory may not be gold in the field; One size does not fit all; The path of least resistance can waylay the best of intentions; Learning is a whole person activity; When you are given lemons, make lemonade; Do it right *and* do it twice; If you build it, they will not come; and Dissemination is a Sisyphean task!