Technical Credit and Systems Design

“Technical Debt” is a term first used by Ward Cunningham in an experience report in 1992. The term refers to the accruing debt or downstream cost that happens when short term priorities trump long term lifecycle costs. The term, when introduced, was used in the context of the development of software systems and has since been expanded to include all kinds of systems.

This talk takes a contrary view; while technical debt is discussed mostly in the context of bad practices, the author contends that the focus should be on system principles that preclude the introduction, either anticipated or unanticipated, of negative lifecycle impacts. A set of heuristics is presented that describes what should be done rather than what should not be done. From these heuristics, some emergent trends will be identified. Such trends may be leveraged to design software and systems with reduced long-term lifecycle costs and, on occasion, unexpected benefits.

Brian Berenbach retired from Siemens in 2013 after working for over 40 years as a systems and software engineer. After retiring, he joined Georgia Tech where he is a part time instructor, mentoring graduate engineering students. He is an ACM Distinguished Engineer, an INCOSE ESEP, and an IEEE Senior Member. He has published widely on software and systems engineering, including a textbook “Software and Systems Requirements Engineering: In Practice” published by McGraw-Hill.

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Date: Thursday, February 21, 2019, 8:00 pm.  
(Refreshments and networking at 7:30 pm.)  
Place: Small Auditorium, Room CS 105  
Computer Science Building, Princeton University  
Information: Dennis Mancl (908) 285-1066  
On-line info: http://PrincetonACM.acm.org

All Princeton ACM / IEEE-CS meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner is held at 6:00 p.m. at Ruby Tuesday’s Restaurant on Route 1. Please send email to princetonacm@gmail.com in advance if you plan to attend the dinner.

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[Map of Princeton University campus]