William Paterson University
College of Science and Health
Department of Computer Science

*UPS Computer Information Technology Lecture Series**

Keynote Speaker: **Dr. Thomas J. Marlowe**

Professor Emeritus (Seton Hall University)

April 16, 2021 (Friday), 5:30 PM – 8:30 PM

Please register in advance for this virtual lecture:
https://wpunj.zoom.us/webinar/register/WN_1hhoriwJTSit6Gcs5incjQ

The Four Principles of Software Engineering

In this presentation, I will present informal but key principles of software engineering—four principles and two meta-principles—in an interactive format (to the extent this can be managed).

I look at preparing for development, following up on development, dealing with development, and learning from development, both specifically software development and problem-solving more generally. I consider the importance both of content knowledge and of "soft skills"—communication, teamwork, leadership, critical thinking, ... These principles are method-agnostic, although I touch on traditional, agile, and hybrid approaches, and briefly on more recent developments.

Whether you are looking to work in software engineering, or in information technology, cybersecurity, data analytics, or technical management, or pursue a different path, and whether you are headed to a professional career or graduate school, these guidelines provide insights for lifelong learning, critical thinking, and career success.

Biography

Dr. Thomas J. Marlowe is Professor Emeritus of Mathematics and Computer Science at Seton Hall University, retiring in the Fall of 2020. He was the coordinator of the computer science program from 1990 to 2017, until entering phased retirement. Tom holds a B.S and M.S in Mathematics from Seton Hall University, and an M.S. in Computer Science, a Ph.D. in Computer Science, and a Ph.D. in Mathematics, all from Rutgers University.

Tom is the author of over 100 refereed papers in a variety of fields, with many collaborators. His research interests have over the years included software engineering, collaboration (including risk analysis, intellectual property issues, and development structures and processes), language support for real-time systems, program optimization and analysis, software engineering, and computer science pedagogy (including problem-solving and critical thinking), as well as topics in mathematics and in information science and technical management. Many of his recent publications and presentations focus on software engineering and interdisciplinary studies, sometimes combined. Tom continues to teach upper-level courses occasionally at Seton Hall as an adjunct.

Agenda

5:35 – 5:45	Welcome and introduction: **Dr. Cyril Ku**, Coordinator of the UPS CIT Lecture Series
5:45 – 6:00	Opening remark: **Dr. Venkat Sharma**, Dean of College of Science and Health
6:00 – 6:30	Invited Speaker: (**UPS Speaker**, speaker name will be provided later)
6:30 – 6:35	Keynote Speaker introduction: **Dr. Cyril Ku**, Professor of Computer Science Department
6:35 – 7:25	Keynote speech: **Dr. Tom Marlowe**, Professor Emeritus of Seton Hall University
7:25 – 7:45	Q & A with **Dr. Tom Marlowe**
7:45 – 8:00	Wrap up and thank speakers and attendees: **Dr. Cyril Ku**
8:00 – 8:30	Student conversations with **Dr. Marlowe** and **UPS Speaker**

All are welcome! This lecture series is open to everyone in the William Paterson University community. For further information, please contact Dr. Cyril S. Ku ([kuc@wpunj.edu,](mailto:kuc@wpunj.edu) 973.720.2952), Department of Computer Science, William Paterson University, Wayne, New Jersey

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After registering, you will receive a confirmation email containing information about joining the virtual lecture.