

Thesis Defense

Computer Science Master's Program

“Pedagogical Perspectives of Practitioner-Turned-Instructors in Upper-Division Computing Courses”

By **Sinchana Shivaprasad**

Abstract:

Computing is a discipline in which a substantial proportion of graduates enter software engineering careers immediately after completing their undergraduate degrees. However, research continues to highlight a persistent gap between the knowledge acquired in university settings and the practical skills necessary to succeed in industry. Faculty who bring prior industry experience may be uniquely positioned to help bridge this gap by integrating applied perspectives and real-world problem-solving into academic instruction. As professors with practitioner experience are increasingly being hired into computer science departments, there remains limited research exploring how their professional backgrounds influence teaching approaches and shape computing education. This thesis aims to explore how professors with industry experience deliver instruction in the classroom, and the extent to which their approaches may be incorporated into the pedagogy of those without similar backgrounds.. Additionally, by exploring how they teach, their motivations for choosing to become professors rather than continuing their professional careers help us understand why they employ the classroom tactics that they do. Data are gathered through interviews with professors who have significant industry experience, and interview transcripts are qualitatively analyzed to identify thematic connections across participants.

Date: Tuesday, June 9th, 2026

Time: 4:00 – 6:00 PM

Location: 14-238b

Zoom: <https://calpoly.zoom.us/j/86834748517>

Committee: Dr. Ayaan Kazerouni, Dr. Ken Kubiak, Dr. Paris Kalathas