University of Southern California
VITERBI SCHOOL OF ENGINEERING

<u>Doctor of Philosophy in Computer Science</u>
Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Ph.D. program in Computer Science is to prepare students to execute original, high-level research in the discipline specific to the student's area of emphasis, especially networks and systems, databases, software engineering, robotics, intelligent agents and organizations, natural language processing, graphics and multimedia, vision, theory of computation, brain theory and neural networks, high performance computing and parallel computing, or in related areas. Graduates might be employed at leading research universities, or in any research-centric arena.

- USC Viterbi School of Engineering doctoral students enrolled in the Ph.D. program in Computer Science will achieve and demonstrate deep methodological skill and an understanding of contemporary research in their respective area of emphasis, and be able to implement innovative research practices under guidance of their faculty advisor and in concert with their research team.

- USC doctoral students enrolled in the Ph.D. program in Computer Science will demonstrate understanding of applying contemporary research in their respective area of emphasis to industry contexts and be able to engage in innovative practices informed by such research pertinent to Computer Science and their area of emphasis in diverse contexts.

- USC doctoral students enrolled in the Ph.D. program in Computer Science will demonstrate understanding of leading research teams in their respective area of emphasis by mentoring and providing teaching assistance to undergraduate and master's students and fellow Ph.D. students who are less advanced than they are in their respective doctoral programs.

- USC doctoral students enrolled in the Ph.D. program in Computer Science will launch an independent research agenda in their respective area of emphasis under the guidance of their faculty advisor.

- USC doctoral students enrolled in the Ph.D. program in Computer Science will complete and orally defend an acceptable dissertation based on original investigation and supervised by their dissertation committee. The dissertation must show mastery of an area of emphasis within Computer Science, capacity for independent research, and a scholarly result.

-