University of Southern California
VITERBI SCHOOL OF ENGINEERING

<u>Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science)</u>
Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science) is to prepare students for employment in the broad array of industries that use data-driven methods for analysis and design. This includes traditional ECE industries that are adopting data-driven methods, emerging industries such as autonomous systems, and data-focused industries such as social networking and cloud computing. Students successfully completing the program will also be well-prepared for PhD study in ECE departments.

- Upon completion of the USC Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science), students will be able to demonstrate broad understanding of the mathematical concepts underlying machine learning, ability to with large data sets, and proficiency in the modern computational frameworks for machine learning and data science.

- Upon completion of the USC Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science) program, students will be able to apply critical principles and skills pertinent to MSEE (Machine Learning and Data Science) duties in their employment and professional practice.

- Upon completion of the USC Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science) program, students will be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to MSEE (Machine Learning and Data Science) duties in international and domestic contexts.

- USC students enrolled in the Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science) program will demonstrate understanding of contemporary research questions, results, and areas of application relating to machine learning and data science.