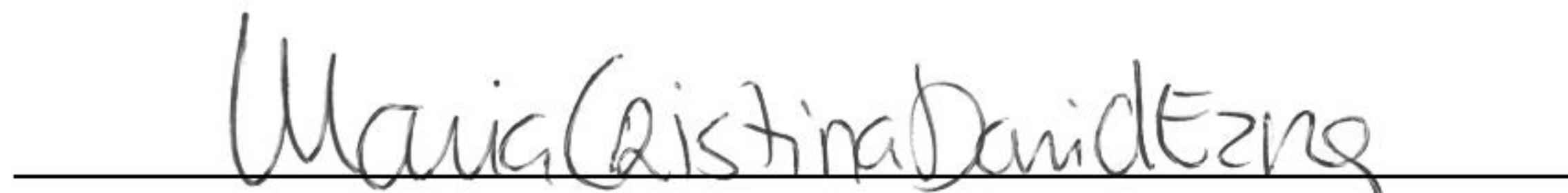Maria Cristina De Oliveira Santos Matos David Ezra, Head of Graduation Academic Unit of Instituto Superior Técnico, Universidade de Lisboa certifies that:

Gustavo Almeida Aguiar, holder of the Identity Card No. ███████, born in Porto Martins, Vila Praia da Vitória and of PORTUGUESE nationality, obtained the degree of Licenciado in Computer Science and Engineering in the DEGREE (BSC) in COMPUTER SCIENCE AND ENGINEERING, on the 21st of July of 2022, with the final mark of 17 (seventeen) points, on a scale of 0 - 20, having been approved in the following curricular units.

Registration Certificate number 31101/IST/L/2022.

Maria Cristina De Oliveira Santos Matos David Ezra

Head of Graduation Academic Unit

Instituto Superior Técnico, Lisboa, on the 9th of November of 2022.

Curricular Unit	ECTS	Grade
LINEAR ALGEBRA	6	14 (fourteen) points
DIFFERENTIAL AND INTEGRAL CALCULUS I	6	10 (ten) points
FOUNDATIONS OF PROGRAMMING	7.5	15 (fifteen) points
INTRODUCTION TO COMPUTER ARCHITECTURE	7.5	13 (thirteen) points
INTRODUCTION TO INFORMATION SYSTEMS AND COMPUTER ENGINEERING	3	17 (seventeen) points
DIFFERENTIAL AND INTEGRAL CALCULUS II	7.5	16 (sixteen) points
INTRODUCTION TO ALGORITHMS AND DATA STRUCTURES	7.5	20 (twenty) points
LOGIC FOR PROGRAMMING	7.5	19 (nineteen) points
DISCRETE MATHEMATICS	7.5	20 (twenty) points
COMPLEX ANALYSIS AND DIFFERENTIAL EQUATIONS	7.5	16 (sixteen) points
MANAGEMENT	4.5	16 (sixteen) points
MECHANICS AND WAVES	6	18 (eighteen) points
OBJECT-ORIENTED PROGRAMMING	6	19 (nineteen) points
OPERATING SYSTEMS	6	17 (seventeen) points
ANALYSIS AND SYNTHESIS OF ALGORITHMS	6	16 (sixteen) points
ELECTROMAGNETISM AND OPTICS	6	18 (eighteen) points
HUMAN-COMPUTER INTERACTION	7.5	20 (twenty) points
PROBABILISTIC AND STATISTICS	6	17 (seventeen) points
THEORY OF COMPUTATION	4.5	13 (thirteen) points
SYSTEMS ANALYSIS AND MODELING	6	16 (sixteen) points

Curricular Unit	ECTS	Grade
MACHINE LEARNING	6	19 (nineteen) points
COMPUTER ORGANIZATION	6	16 (sixteen) points
COMPUTER NETWORKS	6	16 (sixteen) points
DATABASES	6	13 (thirteen) points
COMPILERS	6	19 (nineteen) points
COMPUTER GRAPHICS	6	19 (nineteen) points
SOFTWARE ENGINEERING	6	18 (eighteen) points
ARTIFICIAL INTELLIGENCE	6	19 (nineteen) points
DISTRIBUTED SYSTEMS	6	18 (eighteen) points