Ministry of Higher Education Universidad Central "Marta Abreu" de Las Villas Santa Clara, Cuba

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Faculty: Mathematics, Physics and Computing

Master's in: **COMPUTER SCIENCE**

Master's Certificate of Completion

I certify that Mr <u>César Soto Valero</u>, Student ID <u>89091931786</u>, completed and passed the modules required for this Master's course, the <u>twelfth</u> year of which began on <u>20th April 2015</u> and ended with a dissertation viva voce on 7^{th} <u>December 2016</u>. Below are the modules taken by the student:

	Module Title	Hours	Credits	Grade
1	Databases for Decision-Making	96	2	Excellent
2	Neuro-Fuzzy Computing	96	2	Excellent
3	Parallel Computing	96	2	Excellent
4	Pattern Recognition	96	2	Excellent
5	Artificial Neural Networks	96	2	Good
6	Knowledge-Based Systems	96	2	Excellent
7	Computer Communications and	144	3	Pass
	Networks			
8	Advanced Data Structure	144	3	Excellent
9	Software Project Management	144	3	Pass
10	Computational Mathematics	144	3	Good
11	Scientific Research Methodology	144	3	Excellent
12	Data Modelling and Knowledge	144	3	Excellent
13	Advanced Programming Techniques	144	3	Good
14	Advanced Problem-Solving Methods	192	4	Pass

Totals: <u>1776</u> <u>37</u>

The Academic Board approved the student's non-taught credits, awarding them $\underline{28}$ credits.

The student also presented and defended their dissertation entitled:

Applying predictive models to baseball

in public before the relevant assessors and received a grade of $\underline{\text{Excellent}}$, obtaining $\underline{25}$ credits. Therefore, having amassed $\underline{90}$ credits in total, the student received the academic degree of Master's in:

COMPUTER SCIENCE

Signed: 10th January 2017

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[signature]
Mr Juan Manuel Navarro Céspedes MSc
Faculty Teaching Secretary

[signature]
Dr María Matilde García Lorenzo

Coordinator

[signature]
Dr Yanet Rodríguez Sarabia

Dean

