## Curriculum Vitae

Personal information

Surname/ First name | Pagliuca Paolo

Address |

Telephone | + 1

E-mail

Mobile: +

Nationality Italian

Date of birth 7th October 1984

Gender Male

Professional experience |

Date | From 2nd May 2014

Position | Graduate fellow at CNR (National Research Council) - ISTC (Institute of

Cognitive Sciences and Technologies)

Main activities and | Graduate fellow

responsibilities |

Main projects and technologies | Name of research project: "Cultural evolution in populations of autonomous

robots that develop their capabilities through imitation and associative forms of learning". Main Technologies: C++, FARSA, Python, Artificial Intelligence,

Genetic Algorithms, Artifical Neural Networks

Research Articles | Paolo Pagliuca and Stefano Nolfi. "Robust Optimization through Neuroevolution".

https://arxiv.org/abs/1810.01125

Paolo Pagliuca, Nicola Milano and Stefano Nolfi. "Maximizing Adaptive Power in

Neuroevolution". PLoS One. Vol. 13(7), 2018.

Nicola Milano, Paolo Pagliuca and Stefano Nolfi. "Robustness, Evolvabilty and

Phenotypic Complexity: Insights from Digital Circuits".

https://arxiv.org/abs/1712.04254.

Paolo Pagliuca and Stefano Nolfi. "Integrating Learning By Experience and Demonstration in Autonomous Robots". Adaptive Behavior. Vol. 23 (5), 2015.

Employer's name and address - CNR (National Research Council) - ISTC (Institute of Cognitive Sciences and

Technologies) - Via San Martino Della Battaglia, 44

00185 Roma

Activity sector - Research

Contract type | Graduate Fellowship

Dates | From 2<sup>nd</sup> November 2010 to 30<sup>th</sup> April 2014

Position Analyst programmer

Main activities and Verification and Validation Team Responsible, Documentation Responsible, SW

Tesponsibilities Developer, Medical Aid Responsible, Fire Prevention Responsible

- Main projects and technologies ( Development of a web application for the management of newsfeeds, posts and comments sent from different social networks (Java, Javascript, JSP, Servlets, HTML, PostgreSQL, JBoss)
  - Development of a SCADA Interface for Metro C management system (PLC, Ladder Diagram, RSView, RSLogix, RSLinx)
  - · Development of a Plug-in for a train management system (C programming language)
  - Development of SW for embedded systems, in particular for train management systems (C programming language)
  - Module test and Hardware/Software Integration test activity (VectorCAST test
  - Static Analysis (PC Lint, MISRA C-2004 standard)
  - Responsible for the realization of SW life-cycle documentation: SW requirements specification, SW architecture specification, SW module design specification, SW requirements test specification, SW module test specification, SW/HW-SW integration test plan, SW/HW-SW integration test specification, SW module test report (MS Word, MS Visio, UML)

Employer's name and address | Neat Srl - Via Eduardo D'Onofrio, 304

00155 Roma

Activity sector | IT Professional Services

Dates From 14th April 2010 to 31st October 2010

Position : Analyst programmer

Main activities and | Verification and Validation Team Responsible, Documentation Responsible, SW

responsibilities | Developer

Main projects and technologies | - Development of SW for embedded systems, in particular for train management

systems (C programming language)

Module test activity (VectorCAST test tool)

- Responsible for the realization of SW life-cycle documentation: SW requirements specification, SW architecture specification, SW module design specification, SW module test specification, SW/HW-SW integration test

specification, SW module test report (MS Word, MS Visio, UML)

Employer's name and address Nergal Srl - Via Battista Bardanzellu, 8

00155 Roma

Activity sector | IT Professional Services

#### Education and training |

Dates | 30th May 2015

Title of qualification awarded | IELTS, Academic Level

Name and type of organisation | British Council

providing education and 1 Via di San Sebastianello, 16

training 00187 Roma

Tel: +39 06478141

Dates | From 1st October 2014

Title of qualification | MPhil/PhD student in Computing (Rome Node), Faculty of Science and

Environment

Name and type of organisation Plymouth University - Drake Circus, Plymouth

providing education and | Devon PL4 8AA, United Kingdom

training | Tel: +44 1752 600600

Dates 29th September 2010

Position Registered at "Ordine degli Ingegneri della Provincia di Roma"

ROHA, 21/02/2019

Dates 5th February 2010

Title of qualification awarded | State licence as an Information Engineer

Name and type of organisation

State University "Roma Tre" - Faculty of Computer Engineering Via della Vasca Navale, 79

providing education and training

Tel: +39 0655177040 Fax: +39 065561373/258

26th December 2006 - 27th May 2009

Title of qualification awarded

Laurea Specialistica (2-year Master) in Management and Automation Engineering

Grade 110/110 summa cum laude

Thesis title: "Robot swarms' navigation based on elementary behaviours"

Principal subjects/occupational | Robotics, Swarm robotics, Automation, Control Systems, Management Systems,

skills covered | Optimization Algorithms

Name and type of organisation | State University "Roma Tre" - Faculty of Computer Engineering

providing education and | Via della Vasca Navale, 79

training | Tel: +39 0655177040

Fax: +39 065561373/258

Dates | 1st October 2003 - 22nd December 2006

Title of qualification awarded | Laurea Triennale (3-year Bachelor) in Computer Engineering

Thesis title: "Study of interdependent technologic infrastructures through

Interoperability Input-Output Model"

Principal subjects/occupational

skills covered

Java, C. Industrial Automation, Project Management

Name and type of organisation |

State University "Roma Tre" - Faculty of Computer Engineering

providing education and | Via della Vasca Navale, 79

training | Tel: +39 0655177040

Fax: +39 065561373/258

Dates

April 2003

Title of qualification awarded

DELF, Niveau A1 - A2 - A3 - A4

Name and type of organisation

Centre Culturel Saint-Louis de France,

providing education and

Largo Giuseppe Toniolo, 20-22

training

00186 Roma

Tel: +39 066802626

Dates

15 " September 1998 - 310 July 2003

Title of qualification awarded

Diploma di Maturità Scientifica

Name and type of organisation providing education and

High School Liceo Scientifico Statale Giovanni Keplero", Rome

Via Silvestro Gherardi, 87 training

Tel: +39 065585352

Fax: +39 0655369917

Self-assessment European level (\*) Understanding Speaking Writing Reading Spoken Spoken nteraction production

Listening Upper Upper Upper Upper Upper C1! intermediate C1 intermediate C1 intermediate C1 intermediate C1 intermediate user user USPE user user

French	- P P	Upper	Upper : Upper	Оррег
	CI intermediate	:¡CI!intermediate (	C1 intermediate(C1; intermediate	C1 intermediate
	user	user	user user	user

(\*) Common European Framework of Reference for Languages

#### Social skills and competences | -

- Ability to work efficiently and co-operatively in a team environment;
- Good problem-solving ability;
- Flexibility and versatility.

## Technical skills and competences

- Excellent knowledge of the main techniques for enabling autonomous robots learning (i.e., Reinforcement Learning, Learning by Demonstration);
- Excellent knowledge of Evolutionary Strategies;
- Excellent knowledge of Genetic Algorithms and Artificial Neural Networks;
- Competency in designing and implementing algorithms for manifold tasks concerning both robotics and other fields;
- Ability in planning and implementing automation controls, with particular reference to multi-robot systems;
- Competency in control planning and programming of both mobile robots and manipulators;
- Good knowledge of instruments and sensors for industrial automation systems and robotics;
- Knowledge of techniques of industrial optimisation, operational research and techniques of project management and support to management decision;
- Knowledge of the main programming languages (Java, C, C++, Matlab);
- Competency in SW design and development, especially for embedded systems;
- Competency in SW life-cycle documentation;
- Knowledge of SW life-cycle: requirements analysis, design, implementation, test activity, maintenance, release;
- Competency in SW testing activity.

# Computer skills and | competences |

- Excellent knowledge of Microsoft Office applications (Word, Excel. PowerPoint);
- Excellent knowledge of Internet;
- Excellent knowledge of C++;
- Excellent knowledge of C;
- Excellent knowledge of Python:
- Excellent knowledge of Matlab;
- Excellent knowledge of O.S. Windows and Linux;
- Good knowledge of Java;
- Good knowledge of VectorCAST/C++ and VectorCAST/Cover;
- Good knowledge of Simulink;
- Good knowledge of Database and SQL;
- Good knowledge of HTML and CSS;
- Good knowledge of MS Access:
- Good knowledge of MS Visio.

Other skills and competences Reading (in particular detective stories and science fiction), travelling, listening to music (in particular rock, jazz, heavy-metal). I play drums. I play amateur football (in particular five-a-side) and tennis and I am keen on puzzles.

Driving licence | B licence (Italy)