

# Simone Cirillo

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Nationality Italian  
Date of Birth 10 March 1985  
Gender Male

## Work Experience

|                                |   |
|--------------------------------|---|
| August 2010 – [Frozen]         | <b>Chief Technology Officer, Partner</b>  |
| Activities                     | Full responsibility over the firm's technological assets, infrastructure, strategies and IP. <b>Requirements' analysis, design, and implementation of the firm's proprietary Genetic Programming based automated trading architecture, from proof-of-concept to production.</b> Software R&D in the areas of Algorithmic Trading and Genetic Programming. |
| Employer                       | Almont Capital LLC<br>12800 Hilcrest Road, 75230 Dallas, TX (USA)   |
| Sector                         | Finance, Applications of Artificial Intelligence  |
| December 2014 – June 2015      | External Collaborator   |
| Activities                     | Requirements analysis and software development in support of research activities  |
| Employer                       | Göteborgs Universitet<br>Department Of Philosophy, Language, and Theory of Science<br>Olof Wijksgatan 6, 40530 Göteborg (Sweden)  |
| Sector                         | Artificial General Intelligence, Logic, Linguistics   |
| September 2012 – February 2013 | Consultant  |
| Activities                     | <b>Computational and algorithmic analysis of Raven's APM test items.</b><br>Drafting of a difficulty model based on psychometric data.<br>Requirement analysis for the creation of parallel items.  |
| Employer                       | Psychometrics Sweden<br>Sunnarbovägen 1, 18233 Danderyd (Sweden)<br>for Pearson Assessment Sweden AB  |
| Sector                         | Psychometrics, Applications of Artificial Intelligence  |
| January 2009 – June 2009       | Intern – Software Developer   |
| Activities                     | <b>Creation of the scenario and implementation of the software for a proof-of-concept demonstration about moral reasonings in artificial agents.</b><br>For the final part of the demo the agent was connected to the REEM-B humanoid robot by PAL Robotics (Barcelona, Spain), covered by the Swedish television program SVT Vetenskap Magasin.          |
| Employer                       | iRobis AB<br>Vasaplatsen 2, 41134 Göteborg (Sweden)   |
| Sector                         | Robotics, Applications of Artificial Intelligence   |

## Education

September 2008 – June 2010

Institution

Principal Subjects

Master's Thesis

**Master of Science in Applied Information Technology,  
Intelligent System Design**

Chalmers University of Technology  
Chalmersplatsen 1, 41296 Göteborg (Sweden)

AI techniques and methods, robotics, computer vision, machine learning, prototype design and development, innovation and entrepreneurship

**An Anthropomorphic Solver for Raven's Progressive Matrices**

September 2004 – March 2008

Institution

Principal Subjects

Bachelor's Thesis

**Laurea in Ingegneria Informatica  
(Bachelor's Degree in Computer Engineering)**

Politecnico di Milano  
Piazza Leonardo da Vinci 32, 20133 Milano (Italy)

Computer engineering core knowledge, networking, programming languages, robotics, software and hardware architectures, software engineering

**Design and Development of the Control and Communication Software for a Quadraped Robot**

November 2007

Subject

Level in International Classification

TOEFL iBT: Test of English as a Foreign Language. Score: 112/120

English Language Proficiency

CEFR C2, Cambridge CPE – B/C

## Languages

Mother tongue

Other languages

**Italian**

English

Swedish

German

| Listening       | Reading         | Speaking       | Writing         |
|-----------------|-----------------|----------------|-----------------|
| C2: Proficient  | C2: Proficient  | C2: Proficient | C2: Proficient  |
| B1: Independent | B2: Independent | A2: Basic      | B1: Independent |
| A1: Basic       | A1: Basic       | A1: Basic      | A1: Basic       |

Common European Framework of Reference (CEFR) levels

## Relational Skills

Excellent verbal and written communication and relational skills. Familiarity and competence with international and multicultural contexts, gained from English language learning experiences in UK, USA and Ireland from 1997 to 2002 and from having lived, studied and worked in Sweden from 2008 to 2013.

## Organizational Skills

Very good self-management and prioritization skills, autonomous and independent worker. Comfortable with leading and coordinating small teams, while preferring advisor/leader support roles. Accustomed with having personal accountability and responsibilities. Aptitude to planning and "seeing the big picture" while not disregarding attention to details.

## Technical Skills

Computer, network, AI, and robotic technologies, methods and architectures. Strong competences in the field of Evolutionary Algorithms, particularly Genetic Programming. Machine learning and deep learning models and techniques. Automated/algorithmic trading platforms. Machine administration. Enterprise computer systems. Scientific, technical writing and exposition.

|                         |                    |   |
|-------------------------|--------------------|---|
| Programming Languages   | <b>Experienced</b> | C# / .NET, C, Java, LaTeX, MATLAB, Pascal, Python, XML  |
|                         | <b>Basic</b>       | ADA, Android platform, CUDA C, C++, F#, Lua, Mathematica, SQL, UML, Web development languages   |
| Other Software          | <b>Experienced</b> | Visual Studio, Eclipse, Microchip MPLAB, Spyder (IDEs)<br>HeuristicLab (Optimization / Genetic Programming)<br>SciPy Ecosystem (Scientific Computing)<br>Deltix (Automated trading platform)<br>Office suites<br>Windows OSes   |
|                         | <b>Basic</b>       | GNU/Linux OSes<br>MySQL, MSSQL, SQLite<br>Scikit-Learn (Machine Learning)<br>Theano, Torch, Tensorflow (Deep Learning)<br>AWS – Amazon Web Services<br>2D and 3D graphics applications<br>Web development tools<br>Wordpress  |
| <b>Other Traits</b>     |                    | Naturally curious, inclined and driven to learn and improve, adaptable, reliable.<br><b>Marked critical thinking, logical reasoning and problem solving capabilities.</b><br>Aptitude and preference to research oriented, innovative, experimental work.<br>Ability to perform while under stress or pressure.   |
| <b>Interests</b>        |                    |   |
| Professional/Academical |                    | General Artificial Intelligence, <b>Genetic Programming</b> , Machine Learning, Deep Learning, Knowledge Representation, Machine and Roboethics, Natural Language Acquisition, Autonomous Robotics.   |
| Extracurricular         |                    | Other branches of science and technology, in particular cognitive and neurosciences. Future and tech trends. Electronic music. Videogames.  |
| <b>Publications</b>     |                    | <p>Claes Strannegård, Simone Cirillo, Johan Wessberg<br/><i>Emotional Concept Development</i><br/>Proceedings of the 8<sup>th</sup> International Conference on Artificial General Intelligence AGI 2015. Berlin, Germany. July 2015.<br/><a href="http://dx.doi.org/10.1007/978-3-319-21365-1_37">http://dx.doi.org/10.1007/978-3-319-21365-1_37</a></p> <p>Simone Cirillo, Stefan Lloyd, Peter Nordin.<br/><i>Evolving Intraday Foreign Exchange Trading Strategies Utilizing Multiple Instruments Price Series</i> [Preprint]<br/>arXiv.org. November 2014.<br/><a href="http://arxiv.org/abs/1411.2153">http://arxiv.org/abs/1411.2153</a></p> <p>Simone Cirillo, Stefan Lloyd<br/><i>A Scalable Symbolic Expression Tree Interpreter for the HeuristicLab Optimization Framework</i><br/>Proceedings of the 2014 conference on Genetic and Evolutionary Computation GECCO '14. Vancouver, Canada, July 2014.<br/><a href="http://dx.doi.org/10.1145/2598394.2605692">http://dx.doi.org/10.1145/2598394.2605692</a></p> <p>Claes Strannegård, Simone Cirillo, Victor Ström.<br/><i>An Anthropomorphic Method for Progressive Matrix Problems</i><br/>Cognitive Systems Research, June 2013. Elsevier.<br/><a href="http://dx.doi.org/10.1016/j.cogsys.2012.08.002">http://dx.doi.org/10.1016/j.cogsys.2012.08.002</a></p> |
| <b>Associations</b>     |                    | <p>Ordine degli Ingegneri della Provincia di Milano – The Milan Order of Engineers.<br/>Iscr. n. A 29942, sezione A, settore C.</p> <p>Sveriges Ingenjörer – The Swedish Association of Graduate Engineers.</p>   |