Cristian Păuna

Mobile: +407.4003.0000
Email: cristian@pauna.pro

ResearchGate LinkedIn
GoogleScholar Facebook

I am a focused, adaptable and dedicated business specialist, with extensive experience and varied knowledge and skills across the private industries, as well as an in-depth understanding of various business principles and practices, with notable managerial expertise. I own a Ph. D. degree in economic infromatics, a Bachelor's degree in cybernetics, and statistics, and a Master of Science title in special aerospace engineering. I have started coding in 1990, and software development is my main activity since 1998. I have been involved as a software architect and project manager in several large-scale projects in financial, management, and automated decision-making software. I also have a relevant experience designing mathematical algorithms and computational models for engineering and finance, and I own the copyright of several original capital investment algorithms published on different academic papers.

The large variety of workplace skills makes me a sought after employee. I can develop and maintain strong working relationships at all levels, both internally and externally, and in turn, I strive to motivate teams and individuals towards the successful execution of shared objectives. I can increase the value of a company with my skills and with my sustained work. I am very experienced as a team leader and working towards targets and budgets is a strong point of mine. I am a very analytical, methodical, and well-oriented person, and I can work with people in small and large groups, and this is always a challenge for me. I can be involved in any serious project related to software development, algorithmic trading, high-frequency trading, cryptocurrency trading, decision-making systems, business intelligence systems, financial management, risk management, or economic informatics.

KEY KNOWLEDGE, SKILLS & EXPERTISE

Communication: I can converse easily and confidently to a wide range of people, whether this is over the phone or face-to-face. I like to know and understand the people I meet and work. I think communication is the key to success. I speak fluently four languages, and I want to work in groups. Managing people is one of my favorite activity, and I have proved my talent to link teams.

Management: I have more than eighteen years of managerial experience. I have an extensive background which covers general management, money management, risk management, investment management as well as operational and project management, all of which are backed up by my experienced informational, engineering and financial skills in the international business environment. I also have more than thirteen years of experience in business administration. Business analysis, enterprise, and software architecture design are some of my preferred activities, backed up with several projects implemented over time.

IT (Front-end client side): I am confident in using any Windows or Mac operation system, various Microsoft and Open Office software packages, email, and internet. I have started to code in the year of 1990 in Basic, Pascal, Fortran, and C++ using a mainframe computer with perforated paper cards at the Polytechnic University of Bucharest. Designing new algorithms and client-oriented applications were subjects of my activity from the beginning. Nowadays, I can easily program in HTML, JavaScript, Java, and PHP using different client-oriented frameworks like Angular or Bootstrap. In the last years, I have done several projects in MQL4 and C++ related to MT4 and cAlgo trading platforms. I can also use any object-orientated programming language. I have accumulated significant experience in web programming for global economic software. Designing, testing and developing software programs based on advanced mathematical algorithms is a strong point of mine.

IT (Back-end server side): On the back end activity, I can manage any UNIX, BSD, Linux, or Windows server. I can use any query language or environment to manage a SQL, MySQL, or any other relational database. NoSQL databases are also under my interest in the last time projects. I can use easily server-oriented programming languages like PHP with any HTTP server or Java for node.js. Angular servers were also used in the previous projects. I am specialized in big-data low-latency real-time data streams applications for

financial markets, and I can design and manage a distributed multi servers data-warehouse for a centralized application. My last projects are dedicated to real-time data acquisition servers using Restful API for real-time data streams in the financial industry and cryptocurrency markets. Managing a distributed database and data marts and optimizing the standalone server processes for real-time low-latency data acquisition is a proved strong point in my last activities.

Trading and sales: I had started trading when I was eight years old, and I discovered myself how profitable it is to sell when everyone wants to buy. I have sold anything in this world, from earrings, currencies to cars and trailers, from mousses to industrial computers and servers, form furniture to apartments, villas and wide real estate proprieties. I think I can sell anything because I have developed myself as a good and fair negotiator. In private, I have more than eleven years of experience in financial trading with currencies, individual shares, stock indices, and commodities. In the real estate domain, I have twenty years of trading experience with real budgets and real investments.

Intellectual property: I am the author of several automated trading algorithms for financial markets, and I work to finish many others. Some of my prediction models are published in several academic papers. My finished projects are publicly listed online at the address pauna.pro/projects, and my unfinished work is listed here: pauna.pro/unfinished-projects. I have developed all of these with my ideas, work, and resources, and I own the copyright for all of these. All my trading algorithms are included in a franchise named SuperCont. More details can be found here: pauna.pro/supercont.

Other skills: I can prove anytime that I own excellent analytical, economic, technical, and organizational skills, sustained communication, and conflict management skills, together with leadership and negotiation skills. I can solve problems and to work under pressure in small or large teams. I have sustained managerial and decision making skills, I own a systematic and critical thinking and notable business and industry knowledge. I am able to take risks and responsibilities when there are enough available resources. I can build and sustain excellent presentations orally or in writing, and I have a relevant experience working in different cultural environments.

Languages: I have professional working proficiency in English (as my second language), German (Ich habe B1 Prüfung gemacht, und ich lerne für B2) and French (16 years of learning). I was born on 20 August 1972 in Bucharest, Romania. My native language is Romanian. I have a European Union passport and the right to work in any European Union country.

Driving and travelling: I have B category of driving license since October 1991.
Smooth driving is a hobby of mine.

PROFESSIONAL EXPERIENCE

2021 – present **Managing Partner**, SUPERCONT DMCC (Dubai, UAE – supercont.pro), SuperCont informatics system rental services for automatic capital investment management.

2018 – present **Managing Partner**, Algorithm Invest SRL (Bucharest, Romania - algoinvest.pro), applied business intelligence, research and development of automated investments software systems, dependable dedicated expert software for capital investments.

2011 – 2018 **Principal software developer (Project Manager/Scrum Master/Software Architect),** Algo Trading Service Ltd., Berlin, Germany, automated trading system design, production and maintenance, managing the entire software developers team and technical department. I have designed and developed the software architecture, the data structure, the servers architecture, the distributed data marts architecture, the data connections and streams, the functional processes for collecting data, data processing and reports processes, all included in a real-time low-latency business intelligence system for investment in capital markets. I have all the responsibilities of a Project Manager regarding the software development and maintenance. I am the Scrum Master for this agile project which continue with new requirements and new modules development after the stable version release. I have contributions in the agile management for the real-time processes. On this job I manage the entire coding team on site or remotely, I manage the technical department, I assure the software and business intelligence

system development for new requirements and added activities, I manage the software production for the new processes, I maintain the logical and the optimization processes for the data warehouse, I maintain the API's connections, I test and approve the final code versions and, my favor activity, I design all the trading algorithms and I test the trading models used for the automated decision-making system used for investment in capital markets. Due to some special processes, the data marts structure is implemented also in distributed MySQL databases with an original configuration. The informatics technologies used in this project are MySQL, Unix, PHP, HTML, JavaScript, Angular, Apache, C++, MQL4, Windows, Restfull API, Java, node.js, React, Angular 2 working together on several distributed servers.

2017 – 2018 **Project management and algorithms,** Alune GmbH., Berlin, Germany (tradingbots.org), project management and mathematical algorithms to design and develop a trading platform for cryptocurrencies with arbitrage trading. This was a parallel and challenging part time project. I have designed the entire system, from the software architecture to the end used interface, from the the data structure and database connections to the the trading algorithms. I have built and managed the coding team and I have managed the software production until the MVP version. This was a waterfall iterative project once the entire algorithm was clear from the beginning. The system uses a single MySQL server but the data sources are distributed and managed by several specialized data acquisition processes. The informatics technologies used in this project: MySQL, Unix, PHP, HTML, JavaScript, Angular, Apache, Restfull API, Java, node.js,React, Angular 2.

2009 – 2011 **General Manager,** General Group Company, Bucharest, Romania, a company with the following activities domains: “Import, export and distribution of software, network materials and equipments” and “Real estate investments”. In this position I took the complete managerial responsibilities for a company with more than 50 employees and over 2000 international customers and suppliers. I took a company with a significant budget for real estate investments and I grew up the company more than five times in only two years. (ggro.ro)

2006 – 2008 **General Manager,** General Group Ltd., Bucharest, Romania, a company in the domain “Import, export and distribution of antivirus and economical software” domain. I have managed a small team of developers to build, develop and distribute the global economical software SuperCont and antivirus products on the international IT markets. (ggro.ro)

2001 – 2006 **Project Manager,** General Group Ltd., Bucharest, Romania, a software company building the web based global economical system named SuperCont. The software start from my ideas and linked all economical activities of an international group of companies. The software was made using only FREE resources, wrote in HTML, PHP and JavaScript exploiting a MySQL database on a free BSD server. The software is running with zero costs even today.

1999 – 2001 **Operational Manager,** General Import Export Company, Bucharest, Romania, an international trading company with software and telecommunication materials and equipments. I have managed the logistical department for software distribution and IT maintenance services. I have designed and developed an electronic system to distribute and update antivirus and financial software products. In 1999 the system UpdateMe was a new idea.

1998 – 1999 **Engineer researcher**, Gas dynamics laboratory of COMOTI - Romanian Research and Development Institute for Gas Turbines, Bucharest, Romania. The activity on this job was about software models to design and improve the functional parameters of the centrifugal gas turbines. (comoti.ro)

PROFESSIONAL QUALIFICATIONS & EDUCATION

2017 – 2020 Economical Informatics Doctoral School, Academy of Economic Studies, Romanian state grant for PhD studies, PhD degree in economic informatics with the thesis "Modern Methodologies for Business Intelligence Systems Design. Real-Time Automated Trading Systems for Stock Exchange", (doctorat.ase.ro). In this research activity I have developed a business intelligence real-time system for an investment company in capital markets. I have personal contributions in the data streams management, in the server architecture and stream connections, in the data warehouse and distributed data marts structure, on the financial risk and capital management methods and several contributions regarding original trading algorithms with good returns for the

financial markets. The most of my contributions are included in published academic papers or papers presented on IT international conferences. All my papers are indexed by Google Scholar and Research Gate.

1993 – 1999 Academy of Economic Studies, Cybernetics, Statistics and Economical Informatics Faculty, Economical Informatics Bachelor's Degree in Artificial Intelligence, Dissertation theme: "*Advanced software models for financial markets predictions*". In this economical informatics faculty I completed my advanced mathematical knowledge accumulated in the engineering schools with economical aspects and I start to apply everything for financial markets. (ase.ro)

1996 – 1998 Polytechnic University of Bucharest, Aircraft School, PhD in Aero Acoustics, "*Software models for aero acoustics*" thesis not submitted (upb.ro)

1995 – 1996 *Polytechnic University of Bucharest, Aircraft School, Postgraduate Master of Science Degree in Special Elements of Aerospace Engineering, Dissertation theme: "Software models to compute special elements in aerospace engineering.*" (upb.ro)

1990 – 1995 *Polytechnic University of Bucharest, Aircraft School, Propulsion Systems Bachelor's Degree, Dissertation theme: "Software model for optimisation of existing turbo reactor propulsion systems." During my engineering faculty I have published several scientific articles on Romanian Academy journals* and publications. The articles include more computational models for engineering and are listed on Research Gate.

1986 – 1990 Henry Coanda Aviation High School, Aviation Electrical Systems Baccalaureate Degree. First prize award on the National Aeronautical Contest in "Electrical Board Systems Design." (hcoanda.ro)

ACADEMIC PUBLICATIONS

Păuna C. (2021) Price Probability Predictor. Capital Investments Assisted by a Probability Field. In: Dima A.M., D'Ascenzo F. (eds) Business Revolution in a Digital Era. Springer Proceedings in Business and Economics. Springer, Cham. DOI: 10.1007/978-3-030-59972-0_21 (springer.com) Read this paper.

Păuna C. (2020) Volume Cyclicality. Reliable Capital Investment Signals Based on Trading Volume Invormation. Timișoara, Romania: Timisoara Journal of Economics and Business. ISSN: 2286-0991. DOI: 10.2478/tjeb-2020-0003 (tjeb.ro) Read this paper.

Păuna C. (2020) Price Probability Predictor. Capital investments assisted by a probability field. Bucharest, Romania: International Conference on Business Excellence ICBE2020. Academy of Economic Studies. (bizexcellence.ro) Read this paper.

Păuna, C., Lungu, I. (2020). Informatics methods to include limit conditions into automated capital investment software systems. Bucharest, Romania: 19th International Conference on Economic Informatics. Academy of Economic Studies IE2020. May 2020. DOI: 10.12948/ie2020.04.01 (conferenceie.ase.ro) Read this paper.

Păuna, C. (2020). Behavioural patterns and fears in investor psychology. Berlin, Germany: Research Gate, Research Proposal. DOI: 10.13140/RG.2.2.29367.47521 (researchgate.net) Read this paper.

Păuna, C. (2020). The psychology of using algorithms to automate decisions in financial information systems. Berlin, Germany: Research Gate, Research Proposal. DOI: 10.13140/RG.2.2.19901.61928 (researchgate.net) Read this paper.

Păuna, C. (2020). Reliable Signals and Limit Conditions using Trigonometric Interpolation for Algorithmic Capital Investments. 7th Business Systems Laboratory International Symposium 2020 At: Alicante, Spain. (bslab-symposium.net) Read this paper.

Păuna, C. (2019). *Logarithmic Risk Distribution to build a stable capital growth for any business or investment* . 13th International Management Conference. Bucharest, Romania: Economic Studies Academy. (conference.management.ase.ro). Read this paper.

Păuna, C. (2019). Price Prediction Line. *Investment Signals and Limit Conditions Applied for the German Financial Market.* International Journal of Computer and Information Engineering.Vol.13, No.9, 2019. World Academy of Science, Engineering and Technology. (waset.org). Read this paper.

Păuna, C. (2019). *Trading Fragmentation Methodology to Reduce the Capital Exposure with Algorithmic Trading.* Bucharest, Romania: Database System Journal. Volume X, Issue 2019. 2069 - 3230 (dbjournal.ro). Read this paper.

Păuna, C. (2019). *Aditional Limit Conditions for Breakout Trading Strategies.* Bucharest, Romania: Informatica Economica Journal. Volume 23, Issue 2/2019. ISSN: 1453-1305. Academy of Economic Studies. DOI: 10.12948/issn14531305/23.2.2019.03 (revistaie.ase.ro) Read this paper.

Păuna, C. (2019). *Silent Market Indicator. Methodology to Avoid the Market Risk in No Significant Price Movements.* Timișoara, Romania: Timișoara Journal of Economics and Business. Volume 12, Issue 1/2019. ISSN: 2286-0991. West University of Timisoara. (tjeb.ro) Read this paper.

Păuna, C. (2019). *Progressive Management Methodology for Real-Time Business Intelligence Decision Systems*. Bucharest, Romania: 18th International Conference on Informatics in Economy IE2019 by Bucharest University of Economic Studies, (conferenceie.ase.ro) Read this paper.

Păuna, C. (2019). *A Prediction Model Using the Price Cyclicality Bands Optimized for Algorithmic Trading in Financial Market.* Athens, Grece: International Conference on Intelligent Information Systems ICIIS, 8-9 April 2019 by World Academy of Science, Engineering and Technology (waset.org). Read this paper.
This paper won "Best Paper Award - International Conference on Intelligent Information Systems 2019"

Păuna, C. (2019). *Data Minig Models on Time Price Series for Algorithmic Trading Sysrems.* Bucharest, Romania: Informatica Economica Journal. Volume 23, Issue 1/2019. ISSN: 1453-1305. Academy of Economic Studies. DOI: 10.12948/issn14531305/23.1.2019.03 (revistaie.ase.ro) Read this paper.

Păuna, C. (2019). *Low Risk Trading Algorithm Based on the Price Cyclicality Function for Capital Markets*. Bucharest, Romania: The 13th International Conference On Business Excellence ICBE 2019 Faculty of Business Administration, Bucharest Academy of Economic Studies. Society on Business Excellence. DOI: 10.2478/mmcks-2019-0006 (bizexcellence.ro) Read this paper.
This paper was awarded with "Management and Marketing Award - Challenges for the Knowledge Society"

Păuna, C. (2019). *Trading Signals Based on Fisher Transform for Algorithmic Trading*. Timișoara, Romania: Timișoara Journal of Economics and Business. Volume 11, Issue 1/2018. ISSN: 2286-0991. West University of Timisoara.DOI: 10.2478/tjeb-2018-0006 (tjeb.ro) Read this paper.

Păuna, C. (2018). *Reliable Signals and Limit Conditions for Automated Trading Systems.* Iași, Romania: Review of Economic and Business Studies. Volume XI, Issue 2/2018. ISSN: 1843-763X. Alexandru Ioan Cuza University Press. DOI: 10.1515/rebs-2018-0070. (rebs.feaa.uaic.ro) Read this paper.

Păuna, C., Lungu, I. (2018). *Price Cyclicality Model for Financial Markets. Reliable Limit Conditions for Algorithmic Trading.* Bucharest, Romania: Economic Computation and Economic Cybernetics Studies and Research Journal. Volume 52, Issue 4/2018. ISSN: 1842–3264. DOI: 10.24818/18423264/52.4.18.10 (revcib.ase.ro) Read this paper.

Păuna, C. (2018). *Heikin-Ashi Algorithms Optimized for High-Frequency Trading Systems*, Graz, Austria: Proceeding of the 2nd International Scientific Conference on IT, Tourism, Economics, Management and Agriculture, ITEMA 2018, Nov. 2018, Graz University of Technology. Published by International Journal of Economics and Management Systems. Volume 4, 2019. ISSN: 2367-8925. (iaras.org). Read this paper.

Păuna, C. (2018). *The Quality Trading Coefficient. General Formula to Qualify a Trade and a Trading Methodology.* Bucharest, Romania: Informatica Economica Journal. Volume 22, Issue 3/2018. ISSN: 1453-1305. DOI: 10.12948/issn14531305/22.3.2018.09 (revistaie.ase.ro). Read this paper.

Păuna, C. (2018). *Capital and Risk Management for Automated Trading Systems.* Iași, Romania: Proceeding of the 17th International Conference on Informatics in Economy, May 2018, p. 183-188. Alexandru Ioan Cuza University. (conferenceie.ase.ro). Read this paper.

Păuna, C. (2018). *Arbitrage Trading Systems for Cryptocurrencies. Design Principles and Server Architecture.* Bucharest, Romania: Informatica Economica Journal. Volume 22, Issue 2/2018. ISSN: 1453-1305. DOI: 10.12948/issn14531305/22.2.2018.04 (revistaie.ase.ro). Read this paper.

Păuna, C. (2018). *Automated Trading Software. Design and Integration in Business Intelligence Systems.* Bucharest, Romania: Database Systems Journal, Volume IX, Issue 1/2018, ISSN: 2069 - 3230 (dbjournal.ro). Read this paper.

Păuna, C., Stanciu, Șt., Cicone, T., Cănănău, S., Seiciu, L., Barbu, E. (2001). *Mechanical Transmissions. Tests.* Bucharest, Romania: Bren Publishing House, ISBN: 973-8143-40-3, Apr. 2001. Read this paper.

Păuna, C., Stanciu, Șt., (1994). *Determining the stiffness of the pressed assemblies.* Bucharest, Romanian Academy, Studies and Applied Mechanics Research, Volume 6, Tom 53, Nov-Dec. 1994, p. 613-624 (acad.ro). Read this paper.

Păuna, C., Stanciu, Șt., (1994). *Analysis of the functional characteristics of hydrostatic bearing nut screw type systems.* Bucharest, Romanian Academy: Studies and Applied Mechanics Research, Volume. 4, Tom 53, Jul-Aug. 1994, p. 357-365 (acad.ro). Read this paper.

Păuna, C., Stanciu, Șt., Suciu, C. (1994). *Calculation and Influence of Geometric and Load Parameters on Functional Characteristics of Hydrostatic Radial Bearings.* Bucharest, Romanian Academy: Studies and Applied Mechanics Research, Volume 3, Tom 53, May-Jun. 1994, p. 243-263. (acad.ro). Read this paper.