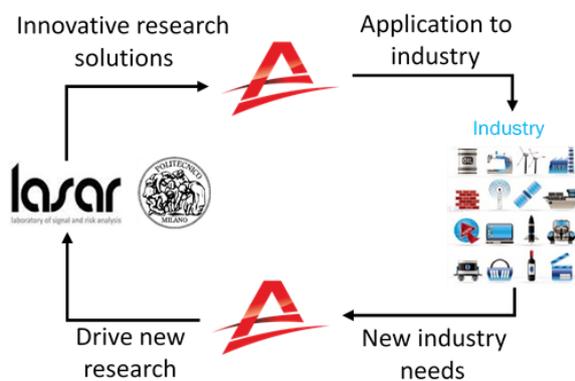




WHO WE ARE

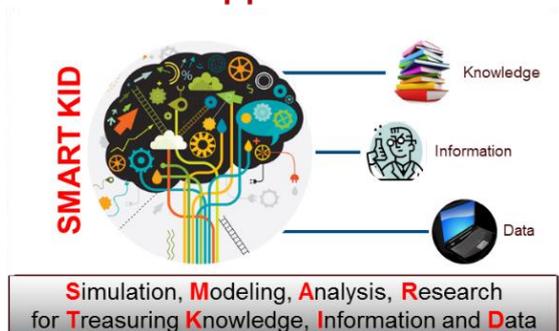
ARAMIS srl (Advanced Reliability Availability & Maintenance for Industries and Services) highly qualified technical consulting company, founded and developed by a group of PhD researchers of the Politecnico di Milano, which since more than 25 years investigates and develops advanced methodologies and algorithms for the analysis of industrial systems and components, in support to several important industrial companies.



WHAT WE DO

Aramis investigates methods and techniques and develops algorithms and models for the analysis of the performance of industrial systems and components in terms of safety, reliability, maintenance, etc. Aramis integrates expertise in the analysis of complex systems with the competence in performing advanced data analytics exploiting the most innovative statistical, artificial intelligence and machine learning techniques, aiming at providing the client with specific, reliable and customized solutions.

Approach



WHO ARE OUR CLIENTS

Aramis works with some of the leader companies and industries, performing the analysis of systems and components of chemical industrial plants (ENI, SOL), energy production plants (General Electric – GE, Ansaldo Energia - AEN), automotive (Fiat Chrysler Automotive - FCA) and railway industries (Alstom, Reti Ferroviarie Italiane - RFI), and companies producing industrial machines, e.g., packaging machines (Tetrapack) and manufacturing industry machines (Fameccanica).

WHICH IS OUR ADDED VALUE

Aramis benefits from the deep engineering knowledge and the systemic view acquired throughout several years of scientific research. During their careers, the PhD researchers of Aramis have been working with some of the most well-known research centers in Europe (Ecole CentraleSupélec-France, Halden Reactor Project-Norway, ETH Zurich-Swiss), Asia (Beihang University of Technology, Tsinghua University-China) and North America (NASA, MIT, UCLA). The knowledge and the mental approach acquired by the Aramis researchers throughout their careers provide them exceptional and unique professional skills which allow tackling unusual industrial problems and developing specific solutions by exploiting innovative analytical techniques. Aramis can fulfill the specific client needs developing innovative and customized solutions not available on the market and solving problems not already tackled at the industrial level.

KEYWORDS

Complex Systems, Reliability Analysis, Maintenance Optimization, Risk Analysis, Resilience Analysis, Vulnerability Analysis, Big Data, Advanced Data Analytics, Machine Learning, Artificial Intelligence, Simulation, Optimization, Portfolio Analysis, Decision Making Support.

OUR TEAM

Partners:



Enrico Zio (PhD) is the president of Aramis and the scientific director of the research and development activities carried out by Aramis. He received the B.Sc. degree in nuclear engineering from Politecnico di Milano, Milan, Italy, in 1991, the M.Sc. degree in mechanical engineering from the University of California, Los Angeles (UCLA), CA, USA, in 1995, the Ph.D. degree cum laude in nuclear engineering from the Politecnico di Milano, in 1995, and the Ph.D. degree cum laude in probabilistic risk assessment from Massachusetts Institute of Technology (MIT), Cambridge, MA, USA, in 1998. He is a co-author of more than 300 papers on international journals.



Michele Compare (PhD) is the CEO of Aramis and the principal investigator of the projects on reliability, availability and maintenance analysis, optimization and decision making. He received the PhD in nuclear engineering cum laude from Politecnico di Milano, in 2011. He worked as RAMS engineer, and risk manager, and is coauthor of more than 50 papers on international journals and conferences.



Piero Baraldi (PhD) is the principal investigator of the projects on modeling, simulation, data analytics, machine learning, artificial intelligence for Prognostics and Health Management (PHM) and maintenance. He received the Ph.D. degree cum laude in nuclear engineering from Politecnico di Milano, Milan, Italy, in 2006. He has been researcher fellow at the “Halden Reactor Project” international research center in Norway, where he worked at the development of PHM methods. Since 2014 he is the treasurer of the European Safety and Reliability Association (ESRA). He is coauthor of more than 140 papers on international journals and proceedings of international conferences.



Francesco Di Maio (PhD) is the principal investigator of the projects on modeling, simulation, data analytics, machine learning, artificial intelligence for safety, security, risk, resilience assessment and management. He received the Double EU-China Ph.D. degree cum laude in nuclear engineering in 2010. He has been principal investigator of the “Science and Technology Fellowship” project, developed in China and founded by the European Commission. He is Chair of the Italian IEEE Reliability Chapter and is currently an active reviewer for more than 10 scientific international peer-reviewed journals. He has published more than 80 papers on international journals and conferences.

Staff:



Luca Bellani (MSc) is the leading developer of analytics solutions and optimization algorithms for assessing and managing complex industrial assets under various KPIs. He received the M.Sc. degree cum laude in mathematical engineering from the Politecnico di Milano, Milan, Italy in 2016.



Francesco Cannarile (Executive PhD candidate) is the leading developer of advanced techniques for PHM solutions and applications. He received the M.Sc. degree cum laude in mathematical engineering from the Politecnico di Milano, Milan, Italy in 2014.



Marco Rigamonti (PhD) is the leading developer of machine learning and artificial intelligence techniques for predictive maintenance solutions and applications. He received the PhD cum laude in nuclear engineering from Politecnico di Milano, Milan, Italy, in 2017. In 2015 he worked at the development of PHM systems for aeronautical applications at the NASA Ames Research Center, Mountain View, CA, USA. He is the coauthor of four papers published on international journals.



Filippo Scarpa (MSc) is the leading developer of advanced computational methods for reliability and maintenance analysis. He received the M.Sc. degree in nuclear engineering from the Politecnico di Milano, Milan, Italy in 2016.

OUR CLIENTS

