

CETIN OZKAN

Management Representative & Department Manager

Country of Residence: Cyprus Nationality: Cyprus (EU Member)

Mobile: +90 533 865 8475 E-mail: cetozkan@yahoo.com

Year of Birth: 1979 Web: www.cetinozkan.info

CAREER SUMMARY

Advisor and management representative over 20 years' experience of international projects and research specialized in astronautics, space and business critical software systems.

KEY SKILLS

Astronautics & Space Transportation

- Astronaut Operations, Experiments, Human Space Flight Safety, Payload Safety, Increments
- International Space Station, Automated Transfer Vehicle, Space Transportation Systems

Product Assurance Management

- Management Representative, Department Manager - Product Assurance & Safety
- Chairman of Internal & Subcontractor Non-conformance Review Board
- Customer & Supplier Interface, Technical Auditing & Inspection
- Proposal Preparation & Evaluation, Documentation
- Configuration Data (Change) Management

Computer Software Systems

- Software Life Cycle, Systems & Software Process Improvement, Standards Review
- Software Systems Management, Software Hazard Analysis & Risk Management
- MS Windows & Office, MS Visio

Standards & Certification

- ISO, IEC, NSTS, ECSS, PSS, MIL, RTCA, SAE, Galileo Software Standards
- ISO 9001:2015, AS / EN 9100:2018 Certification

EMPLOYMENT HISTORY

Space Applications Services, Belgium

2016 – Present

Department Manager - Product Assurance & Safety

Management Representative reporting on company Quality Management System (QMS), and Department Manager in Product Assurance & Safety Department. Responsibilities include defining quality policies, processes, procedures and assuring their successful execution.

- **Management Representative:** Report to the Executive Board on the performance of the QMS and any need for improvement on regular basis. Ensure the promotion of awareness of customer requirements throughout the organization and communicate customer satisfaction.
 - **Department Manager:** Manage department by assessing and monitoring its budget, workload, assign work packages to staff and nominate them to the projects. The role involves the establishment of the QMS and once the system has been certified, assuming responsibility for on-going system maintenance and effectiveness of operations. Responsibilities include supervision of **Dream Chaser (USA), LAPLACE, CAMP, ERSA, TSU, FSLVMU2 (ESA) and ICE CUBES (Company)** projects.
 - **Certification:** Creation, assessment and improvement of company QMS system based on the requirements of EN 9100:2016 (which incorporates the requirements of ISO 9001:2015). Additionally, liaise with the external assessment body on matters related to QMS issues.
 - **Training:** Provide mentoring and training of company staff to assure they are introduced to the company QMS policy and processes relevant to their activities.
 - **Auditor:** Establish, execute, and maintain the internal audit programme to verify that the QMS conforms to the planned arrangements, effectively implemented and maintained while the records are available. This includes auditing of company staff and suppliers respectively.
-

RUAG (Oerlikon) Space, Switzerland**2007 – 2011****Product Assurance Task Manager**

Provide quality assurance and safety management of software, electronics, optics and mechanical systems. This includes supporting project team in management of configuration, critical items, risks, safety and hazard control. Additional responsibilities include driving Non-conformance Review Boards, preparation of proposals, participation to the project meetings & reviews and release of the related documentation according to EN 9100:2004 (based on ISO 9001:2000).

- **PA Task Manager:** Product assurance management of “ARTES-11 Small GEO”, “REDSAT”, “ARSAT”, “NuStar”, “BepiColombo” Solar Array Drive Assembly (SADA) & Rotary Actuator (SARA) and Laser Modulator of “LISA Pathfinder” projects. Responsibilities include inspection of internal and subcontractor’s facilities, processes, staff, deliverables and meetings with customers.
- **ARTES-5:** Prepare Non-conformances (NCRs) and Configuration Item Data List (CIDL).
- **TanDEM-X:** Review, modify and update the Failure Modes, Effects and Criticality Analyses (FMECA), and Critical Items List (CIL).
- **Galileo:** Prepare and evaluate the Non-conformances (NCRs), Waivers (RFWs), and action items as required for the Galileo SADA. Review the software product assurance issues for the Environmental Monitoring Unit (EMU) and prepare proposal for the Laser Retro Reflector (LRR) on PA issues.
- **ExoMars:** Prepare Cleanliness Requirements Specification, End of Life Cleanliness Analysis, Hazard Analysis and FMECA for the Main Separation Assembly and Locomotion Subsystem of ExoMars Rover.

Airbus Defence and Space (EADS ASTRIUM Space Transportation), Germany**2005 – 2007****Software Quality Assurance & Payload Safety Engineer**

Provide quality assurance support for the software, hardware, and mechanical systems. This includes software process improvement, standards development, configuration control and payload safety support to International Space Station (ISS) increments.

- **ASSERT:** Develop future systems and software engineering methodologies for the space sector based on formal methods. This includes the development of process definitions by reviewing ISO/IEC 12207/15504/15288, DO-178B, ARP 4754 and updating existing standards.
- **ECSS Standards:** Review, evaluate and propose improvements to the ECSS Secretariat on the ECSS E-10/40, Q-20/30/40/80 standards.
- **ATV GS-STF:** Review, audit, interface, document and supervise the qualification test campaigns for the ATV Ground Software Simulation and Training Facility.
- **Increment 14 & 15:** Manage the safety aspects of the experiments CARDIOCOG-2, NOA-2, SAMPLE, IMMUNO and ALTCRISS for the ISS Increment 15, plus YING, BASE, LEUKIN and SEM for Increment 14. Responsibilities include review, modification, preparation of flight safety data packages, re-flight & re-certification assessments, including astronaut operations performed on-board ISS and unique hazard reports for upcoming acceptance tests.

Critical Software, Portugal**2005****Space Systems Software Engineer**

Provide systems engineering support for mission critical information systems with particular focus on space systems software.

- **FLPP Phase 1:** Feasibility study on software verification and validation, numerical error resolution and FDIR techniques for ESA’s Future Launchers Preparatory Programme (FLPP).
 - **ISVV Process & Facility – ERA:** Design and code analysis (Software FTA, FMECA), for the European Robotic Arm (ERA) case study of ESA.
 - **DHSE – Prototype Validation Plan:** Establish a software validation test plan for the Distributed Heterogeneous Simulation Environment (DHSE) framework.
-

Military Service, Cyprus**2003 – 2004****Computer Engineer, Cyprus****2001 – 2003**

- **Bluetooth System Simulation - Physical Links:** The simulation includes the efficiency comparison of Synchronous Connection Oriented Link and Asynchronous Connection-Less Link.
- **Mathematical Modelling of Data Link Rates of 802.11a & 802.11b:** The model includes the relation between data link rate and distance, with the comparison of 802.11a & 802.11b.
- **Technical Support - CK Engineering & Construction Ltd:** Provide hardware & software bug fix support and maintenance predominantly for PC and Microsoft products.

RESEARCH

Time & Space, Cyprus**2011 – 2015****Research – Zaman ve Mekan (including Fundamental Forces - Unification Theory)**

Theoretical study on Time & Space and four fundamental forces with an attempt to unify them.

International Conference on Space Optics, France**2008****Paper - Laser Modulator for LISA Pathfinder**

ESA experiment to demonstrate the key technologies needed to detect gravitational waves in space & time.

TRAINING & EDUCATION

IAASS, ESA-ESTEC, Holland**2006 – 2011****Member – International Association for the Advancement of Space Safety (IAASS)****Space Safety Academy - Payload Safety Course**

This course is designed as a guide to the ISS payload safety review process including the safety standards of ESA & NASA. The understanding of payload safety is gained by hands-on fundamentals of payload hazard analysis, hazard documentation and presentation to the Payload Safety Review Panel.

Cranfield University, UK**2000 – 2002****MSc Astronautics & Space Engineering****Thesis: "Safety & Security Issues for Human Presence in Space – ISS"**

Simulate the basic environmental threats to ISS and astronauts with particular focus on potentially hazardous near earth objects. The simulation includes the characterization of the natural and manmade debris environment with the comparison between the modelled and measured detection rates to allow conclusion about the quality of the model - ESA MASTER/PROOF. Further study includes collusion warning and avoidance strategies with STK.

Group Project: "Communications & Data Handling System of Nanosatellites"

Design and simulate the efficiency of the on-board computer architecture of two identical nanosatellites during their communication with ground station and each other. Feasibility study of space based internet TCP/IP communication protocol of satellites made by using the data obtained from NASA, as the performance differs from terrestrial environment.

Eastern Mediterranean University, Cyprus**1996 – 2000****BSc Computer Engineering (Honors Degree)**

REFERENCES

References will be provided.