

## CURRICULUM VITAE



### PERSONAL DATA

Name and surname: Davor Mance  
Day and place of birth: November 28<sup>th</sup>, 1954, Fužine, Croatia  
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### EDUCATION AND DEGREES

2010 – 2012 Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB), University of Split, Croatia, Ph.D in technical sciences, in the field of electrical engineering – electronics  
1981 – 1986 Faculty of Electrical Engineering and Computing (FER), University of Zagreb, Croatia, M.Sc in technical sciences, in the field of electrical engineering – electronics  
1973 – 1978 Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB), University of Split, Croatia, Bachelor of Science – Diploma Engineer of electrical engineering - electronics

### LICENCES

1999 – P.Eng, Professional Engineers, Ontario, Canada

### EXPERIENCE

2000 – *ETH Zürich, Swiss Federal Institute of Technology, Institute of Geophysics, Zürich, Switzerland*  
System Engineer

- Development of inertial system front-end electronics for the detection of gravitational waves in the context of fundamental physics research (ESA / NASA missions: LISA Pathfinder, LISA GRS)
- Development of electronics for the control, acquisition and signal processing of various seismic sensors for geophysical exploration on Mars and the Moon (CNES / ESA / JAXA / NASA missions: Mars Netlander, ExoMars, Selene-2, InSight-proposal)

- Development of detector and amplifier electronics of the laser return pulse for the digital mapping of planet Mercury (ESA mission: Altimeter on Bepi Colombo)

1998 – 2000

*Optech Inc., Toronto, Ontario, Canada*

ALTM System Engineer

- System engineering of the Airborne Laser Terrestrial Mapper (ALTM)
- Design of a detector and a laser pulse discriminator and time interval-meter electronics with picosecond resolution
- Mirror servo electronics design of a 3D laser scanner

1994 – 1998

*TSI Techno Scientific Inc., Toronto, Ontario, Canada*

Electronics Group Leader

- Development of an ultrasonic system for medical examination and early detection of nitrogen bubbles in the blood of divers and astronauts after quick de-pressurization (used on Space Shuttle missions)
- Development of electronics of ultrasonic systems and instruments for industrial applications (measurements of position, thickness, porosity of materials, controlled spraying of chemicals in agriculture, cleaning of sporting equipment)
- Design of ultrasonic equipment to help blind people (stereoscopic detector of obstacles – Sonic Cane)

1992 – 1994

*Faculty of Engineering, University of Rijeka, Croatia*

Assistant for:

- Basics of Control Engineering (Electrical Engineering)
- Automation and Control (Mechanical Engineering)

1979 – 1994

*FOTONA D.D. – Electro-optics, Ljubljana, Slovenia and  
SOUR Rudi Čajavec – RO Professional Electronics, Banja  
Luka, Bosnia and Herzegovina*

Chief Engineer for Systems

- Optimal controller design for the stabilization of mirrors in optical equipment and design of sensors in various control systems
- Software development for control and guidance
- Development and retrofit of control systems in special vehicles (electro-hydraulic actuators, laser rangefinders, inertial sensors for moving stabilization systems)