

# Curriculum Vitae

**Name:** Jean Iaquina  
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## Key qualifications:

- ✓ Solid education in mathematics and physics.
- ✓ Academic background in climate/meteorology, satellite data, instrumentation and intelligent transport systems.
- ✓ Work experience with numerical models, image/data processing, classification and machine learning in general.
- ✓ Resourceful person who like to do things and consider every aspect in a problem, structured and focused all the way through a process.

## Work experience:

From 2018	<b>University of Oslo, Geosciences department (MetOS), Norway</b>	<b>Research software engineer</b>
	Responsible for developing & maintaining the Norwegian Earth System Model (NorESM) and providing reliable, timely and coordinated technical support for climate model users. Support for the efficient operation of the E-infrastructure for the model development.	
2014 – 2018	<b>InnovA QUINTA (InnovA5), Norway</b>	<b>Self-employed business</b>
	Provision of professional, scientific and technical services.	
2006 – 2013	<b>Transport Research Laboratory (TRL), UK</b>	<b>Technical leader</b>
	Responsible for the “Technology development Group” research activities in the automated condition monitoring of transport infrastructures for preventive operation and maintenance, climate adaptation (testing new materials, drainage, energy harvesting, “Urban Heat Island Effect”), intelligent transport systems (adaptable traffic signs), self-driving vehicles (e.g. “Lane Keeping Assistance”).	
2001 – 2006	<b>Road Directorate (LCPC/IFSTTAR), France</b>	<b>Researcher</b>
	Research in metrology & instrumentation at the Central Laboratory for Roads & Bridges. Development of new measurement methods, design & manufacturing of prototype instruments for non-destructive testing, “Weigh-in-Motion” of heavy vehicles (strain gauges / piezoelectric sensors), evaluation of road surface texture and friction without contact (optical / acoustic technologies), smart sensors.	
1997 – 2001	<b>National Center for Atmospheric Research (NCAR), USA</b>	<b>Consultant</b>
	Experimental data / image analysis, ice clouds microphysics, numerical climate models.	
1995 – 1996	<b>University Blaise Pascal (Clermont-Ferrand-II), France</b>	<b>Non-tenure track</b>
	Teaching mathematics and fluid mechanics (up to Masters), research in atmospheric modelling.	
1991 – 1992	<b>Directorate General of Armaments (DGA), France</b>	<b>Military service</b>
	Algorithm development.	

## Education:

	<b>at University Blaise Pascal (Clermont-Ferrand-II), France</b>	
1992 – 1995	<b>PhD</b> in atmospheric physics and satellite remote sensing	(in collaboration with the GSFC/NASA, USA and JRC/EC, Italy).
1990 – 1991	<b>Masters</b> in physics and geophysics.	
1989 – 1990	<b>Bachelors degree</b> in physics, electronics and mathematics.	

**One patent:**

On a fast and automated method to detect leakages and blockages in pipes using acoustic waves. This is in contrast with the usual method of inserting a video camera which is slowly manoeuvred inside a pipe to collect images that an operator still has to evaluate subjectively. This approach was originally developed for surface water drainage pipes (e.g., found along freeways & railways), however it is also of interest for other application areas such as oil / gas.

**Scientific communications:**

Over 80 peer-reviewed publications, conferences and public reports (see <https://www.researchgate.net>).

**Organizational and technical competences:**

Experience in initiating and leading large inter-institutional projects (including writing proposals, technical management, human and financial resources, risk assessment and reporting). Coordinated the European project "INROADS" (see <https://cordis.europa.eu/project/id/285343>).

**Programming and IT skills:**

E-infrastructures	HPC, cloud computing, containers
Programming	C, Fortran
Data Processing & Visualization	IDL, Matlab, Python
Linux distributions	Ubuntu, openSUSE, Fedora, Centos
Data acquisition	LabView
Electronics & Microcontrollers	Arduino, ESP12 / 32, MSP430
Internet of Things	Wi-Fi, ZigBee, Bluetooth, RFID
3D Finite elements	Comsol Multiphysics
Enterprise Resource Planning	Maconomy
3D printing (Homemade RepRap)	DAC (OpenSCAD, SOLIDWORKS, etc.)

**Driving licence:** Class B

**Languages:**

Norwegian (Bokmål)	Good
English	Fluent
French	Mother tongue
Italian	Mother tongue

**Leisure activities:**

Fishing  
Mountain biking  
Cooking  
Restoration and upgrading of old espresso machines.