Fond Memories and Sweet Dreams
about Dependable Computing

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a talk presented in honor of Jean-Claude Laprie
a dear friend and co-worker since 1976
at LAAS in Toulouse, on 15 April 2010

1.

In the Beginning - How I met Jean-Claude

Fall 1960 – I complete Ph.D. at the U. of Illinois at Urbana and start designing a self-repairing computer for interplanetary spacecraft at Caltech's JPL

March 1971 – I chair FTCS-1 in Pasadena, California

June 1975 – A move to Europe: FTCS-5 in Paris!

Sept. 1976 – I am invited to speak at III Congress National de Fiabilité in Perros-Guirec, France

Two gentlemen from LAAS walk up to me in the hotel lobby and propose research cooperation between LAAS and UCLA. They are: Jean-Claude Laprie and Alain Costes

the Result : 33 years (and going on) of intercontinental friendship and cooperation in research and professional activities about dependability of all kinds

1.

Fond Memories of Working with Jean-Claude
(and several good friends as well)

✳ **Building a professional community — of great vitality**
40 FTCS and DSN meetings, and more to come
58 WG 10.4 meetings, and going strong

✳ **Striving to sort out concepts in an expanding discipline**
from Santa Monica (FTCS-12) in 1982
to the "Taxonomy" paper in TDSC in 2004
and still working hard to make it better

✳ **Enhancing the European Research Community**
by leading the ReSIST Network of Excellence project

and ✳ **Preaching dependability around the world:**
..., Malibu, Martinique, Tasmania, Goa, Cape Town, Tahiti, ...

2.

Some Very Sweet Dreams about Building Things:

#1: A "Referee's Avatar" that does the dirty work in the jungle of millions of texts:

- Finds the relevant papers
- Cleans up the spelling, syntax and terminology
- Analyzes the content for shortcomings
- Writes an evaluation, and
- Asks the Referee to approve (or reject) it

The work was initiated in the ReSIST project but - there is a long way ahead to go...

3.

Sweet Dream No.2:

A Universal All-Hardware Fault Tolerance Infrastructure

- Immune to Malicious Software
- Fault-tolerant to Hardware Faults
- Serves every Client System that can send requests for help
- Returns pre-determined recovery commands
- Provides decision (voting) services to Client System
- Can survive major disasters and restart system

My favorite applications:

- A 1000 day mission to Mars with dependability of a 15-hour airliner flight

- A fault-tolerant chain of simple spacecraft to the next (closest) star in the universe

4.

In Conclusion:

It is my pleasant duty to convey to Jean-Claude heart-felt congratulations and best wishes from the VMU Kaunas ReSIST team:

- Juozas Augutis
- Gintarė Grigonytė
- Rūta Marcinkevičienė
- Kęstutis Šidlauskas
- Inga Šeputaitė

  and ...

- the messenger - Algirdas Avižienis

Jean-Claude: May you live long and prosper!

5.