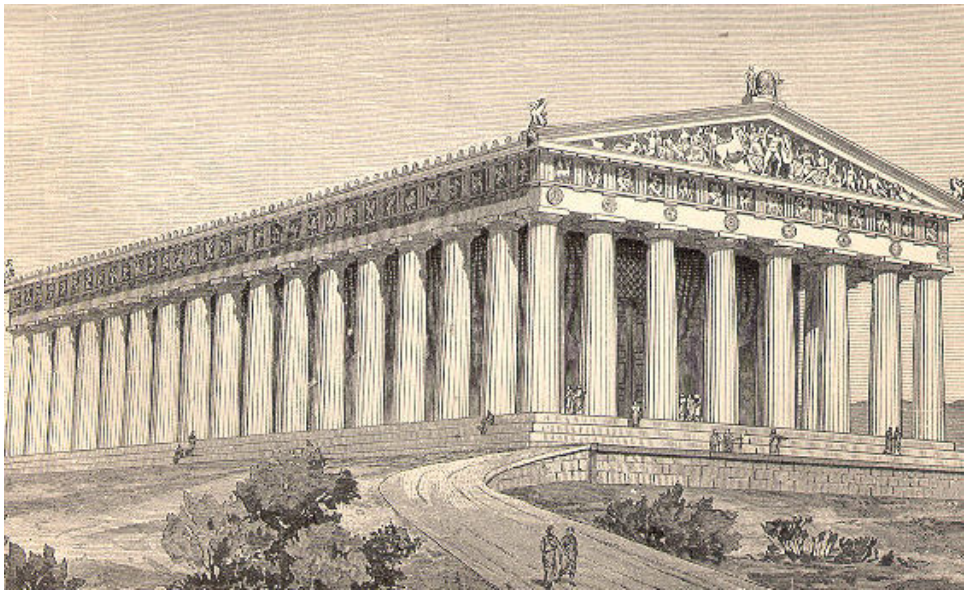
Research in Canada: A living experience

Nikolaos Tsantalis

My journey



Software aging

Refactoring

jDeodorant

when quality matters the most...

Publications

IEEE TRANSACTIONS ON SOFTWARE ENGINEERING

The Journal of Systems and Software

Academic Impact

Citation indices

	All	Since 2008
Citations	561	507
h-index	12	11
i10-index	14	13

- Over **500** citations (170 PhD related)
- Over **15** academic licenses for JDeodorant's source code
- Several empirical studies based on JDeodorant and other tools.

Industry Impact

Since the beginning of 2011:

- **200-300** installations/month in Eclipse Marketplace
- Over **4,000** refactorings applied with JDeodorant
- Over **100** companies/organizations using JDeodorant

My journey cont'd

Postdoc at UofA

Government of Alberta

IBM

UNIVERSITY OF ALBERTA

- Dr. Eleni Stroulia is the NSERC/iCORE **Industrial Research Chair** on "Service Systems Management"
- Funded $**2.8 Million** from NSERC, IBM, Alberta Innovates, and UofA

My journey cont'd

My academic home

My highlights at Concordia

- Taught 2 courses:
  - Object-Oriented Programming II (undergrad)
  - Software Measurement (grad)
- Introduced a new grad course on **Refactoring**
- Hired 3 grad students (2 PhD, 1 Master) and 2 undergrad students (summer projects).
- Received **NSERC Discovery Grant** ($100K)

Research in Canada

$$Research \Leftrightarrow Funding$$

Funding comes from:

- Federal Funding
  - Natural Sciences and Engineering Research Council
  - Social Sciences and Humanities Research Council
- Provincial Funding
- Companies
- University (Scholarships, Start-up grant)

2011-2012 Funding breakdown:

- $**1.1 billion** in total
- $**177.9 million** in Information and Communication Technologies
- **1,938** funded Professors
- **398** Industrial Partners (contributing $25.8 million)
- **5,008** Awards to Students and Fellows
- **163** NSERC Research Chairs

NSERC CRSNG Discovery Grant

- Research proposal (5-year plan)
- Peer-review process (400 researchers form 12 evaluation groups for each discipline)
- Evaluation Criteria:
  - Scientific Excellence of the Researcher
  - Merit of the Proposal
  - Contributions to the training of Highly Qualified Personnel
- 3,500 applications every year (50-60% are funded)

The life of a Professor

- A multi-tasking optimization problem
  - Teaching Courses
  - Supervising Students
  - Attracting & Recruiting Students
  - Managing Budget
  - Applying for Funding
  - Service to the Community (Program Committees, Journal Reviewer)
  - and … Research

Thank you!!